APPENDIX D

UTILITY ASSESSMENT

CONTENTS

APPENDIX D

UTILITY ASSESSMENT

D.1. INTRODUCTION

This appendix provides information on the utility type, location, capacity, reliability, availability, and costs. Note that the utility costs and capacities reported herein are based on current usage patterns and operating costs, and are subject to change prior to the anticipated solicitation issue date. Contractors should verify the validity of this data prior to submitting any cost proposal

The Portsmouth Gaseous Diffusion Plant (PORTS) was constructed in the mid-1950s with the inclusion of adequate site utilities, with the exception of imported electrical power and telecommunications, to function as a stand-alone operation. PORTS has an on-site steam plant, water treatment plant, wastewater treatment plant, compressed air plants, and storm water management system. These systems have been in operation with nominal preventive maintenance and only upgraded as required to remain functional.

In the late 1970s, the Gas Centrifuge Enrichment Plant (GCEP) was constructed adjacent to the diffusion plant. Existing utilities were extended to the GCEP site and a recirculating heating and cooling water system was placed in service plant-wide as applicable. The proposed Depleted Uranium Hexafluoride site is located north of the GCEP plant site.

The United States Enrichment Corporation (USEC) currently leases and operates the gaseous diffusion plant facilities and utilities from the U.S. Department of Energy (DOE). All utility rates will need to be negotiated with USEC or commercial vendors and listed rates will reflect current USEC and commercial vender rates to DOE. USEC has announced their intention to halt production operations at PORTS and progressively return the facilities and utilities to DOE. This assessment is based on continued operation of the site utilities by DOE at current costs. USEC has decided to discontinue operations of the gaseous diffusion plant within a year; this decision could impact availability and cost of utilities.

D.2. UTILITY IDENTIFICATION, HISTORY, AND DESCRIPTION

D.2.1 INTERPLANT ROADWAYS

The proposed site roadways were constructed during the mid 1950s and late 1970s and are 6 in. of asphalt over a 9-in. stone base rated to handle 85,000-lb gross vehicle weight loading. The Contractors Road on the south side of the site is a mixture of old paved roads and crushed stone surfacing in sections. These roads have received only repairs and little routine maintenance.

D.2.2 SANITARY WATER AND FIRE WATER

Raw water is pumped from three well fields adjacent to the Scioto River near Piketon, Ohio, to the X-611 Water Treatment Facility originally constructed with the diffusion plant. The X-611 facility has been upgraded progressively over time to remain in compliance with State of Ohio drinking water standards. The overall distribution system consists of underground steel pipelines within the diffusion plant and the proposed site.

D.2.3 RECIRCULATING HEATING AND COOLING WATER

Recirculating cooling water is provided by the X-630 Cooling Tower pump house. The steel underground piping distribution system was installed in the late 1970s and early 1980s. Recirculating supply and return is available on the west side of the X-744T Building.

Recirculating heating water is process water heated by the diffusion plant process, and the distribution system consists of underground steel piping. Due to the shutdown of the GCEP cascade, which is planned for next year, this utility should not be available.

D.2.4 ELECTRICITY

The Ohio Valley Electric Corporation (OVEC) is the electric utility providing service to the PORTS facility. OVEC operates 387 miles of 345-kV double-circuit transmission lines and five electrical substations with interconnections with four major utility systems. The PORTS site is serviced by four double-circuit 345-kV feeds. There are also two single circuit 345-kV and two 138-kV connections serving the site. There are also two single-circuit 345-kV connections and two 138-kV connections with American Electric Power for backup. The transmission system is protected by three zones of relaying with fast-acting carrier current relaying as the primary protection. Electrical power to the proposed site is available from two 13.8 kV aerial lines. One runs north-south through the center of the proposed site and the other runs north-south along the west side of the site. All systems maintain completely redundant capabilities.

D.2.5 NATURAL GAS

Natural gas service is not available at the site. Service is available from Pike Natural Gas Company's main gas line near Zahn's Corner, Ohio, approximately 5 miles north of the proposed site.

D.2.6 TELECOMMUNICATIONS

The PORTS site currently has two Fujitsu-Omni S3 telephone switches with 2300 existing line connections. Service to the proposed site is limited and will require upgrading for capacity. This service will need to originate in the X-540 Building and can be installed in existing wire ways except for the last 600 feet to the site. The PORTS site feed lines are copper cables capable of handling analog and digital signals through the Piketon, Ohio, exchange. Long distance service is through the Federal Telephone System. Commercial phone service is available. The site distribution system contains both copper and fiber optic units.

D.2.7 STEAM

The X-600 Steam Plant at PORTS is a coal fired steam plant constructed in the Mid 1950's to supply steam to the diffusion plant. The above ground steel piping distribution system ends at the X-330 Building. This system currently has a capacity of 4600 pounds per hour and there is the possibility of extending service to the proposed site. However, based on various GCEP/USEC shutdown scenarios, this utility may not be available since the full capacity of the steam plant may be dedicated to providing existing facilities with heat.

D.2.8 SEWAGE

Sewage treatment at the PORTS site is provided by the X-6619 Sewage Treatment Facility. This plant was constructed in the late 1970s. The system is activated sludge using plug flow processes, aerobic digestion, secondary clarification, and granular-media filtration for effluent polishing. Postchlorination is used to produce a bacteriologically safe effluent, and the final product is dechlorinated with sulfur dioxide before discharge to the Scioto River at National Pollutant Discharge Elimination System Permit Outfall 003. Sewage from the proposed site can report to the X-6619 facility via gravity pipelines within and adjacent to the site.

D.2.9 STORM WATER DRAINAGE SYSTEM

The proposed site has a developed and functioning storm water system consisting of open ditch and some very limited storm drains adjacent to the existing buildings that discharge to open ditches.

D.2.10 COMPRESSED AIR

Compressed instrument quality air is available at the X-330 Building and will require extension to the site. The distance to the service is approximately 950 feet. The available capacity is 1500 scfm.

D.2.11 NITROGEN

Nitrogen is currently received in liquid bulk form and with limited distribution to the GDP process buildings. The posed site would require a bulk receiving facility.

D.3. UTILITY CAPACITY, RELIABILITY, AND AVAILABILITY

D.3.1 INTERPLANT ROADWAYS

The interplant roadways can handle 85,000-lb gross vehicle weight loads. Pavement lane widths range from 9 to 22 ft. Paved roads exist at the proposed site. Costs are limited to repair if damaged due to concentrated construction traffic. Roads used will be returned to as-found condition.

D.3.2 SANITARY WATER, COOLING WATER, AND FIRE WATER

Sanitary water is available adjacent to the west side of the proposed site. Flow rate is 250 GPM. Service is an underground steel pipeline with an approximate age of 45 years. The system is looped throughout the site resulting in good reliability. Water cost through the USEC lease is $1.105 per 1000 gallons. Fire protection water is available at a rate of 8,250 gallons per minute also at the same location and cost. Fire protection water is supplied by underground steel pipelines with the same history and reliability as sanitary water lines.

D.3.3 RECIRCULATING HEATING AND COOLING WATER

Recirculating cooling water is available adjacent to the site to the west at a rate of 6050 gpm. Cost is $0.92 per 1000 gal. Reliability of the system is moderate due to age and corrosion of the steel supply pipelines.

Recirculating heating water is currently available adjacent to the site on the north and west sides at a rate of 6040 gpm. Recirculating heating water is process water heated by the diffusion plant process. Therefore, due to the planned shutdown of the GCEP cascade next year, this utility should not be available.

D.3.4 ELECTRICITY

The X-530ASwitch Yard has a capacity of providing a normal load of 140 MW with a peak load of 210 MW at a rate of $0.02 per kilowatt-hour with a high degree of reliability. This service is available at the switchyard and house and will require upgrade to the proposed site.

D.3.5 NATURAL GAS

Natural gas is not available at the site. The service is available 5 miles north of the site at 150,000 ft^3/hour and a cost of $0.35 per 100 ft^3 based on 90,000-ft^3/hour rate.

D.3.6 TELECOMMUNICATIONS

Telephone service is available at the X-540 Building and will require upgrading to the proposed site. Very limited service is available adjacent to the site. The switch currently has 2300 copper wire lines. The cost for long distance service is $0.10 per minute. Reliability is good.

D.3.7 STEAM

Steam is currently available at 4600 pounds per hour at 125 psig from the X-600 Steam Plant via overhead steel lines currently located adjacent to the X-330 Building. There is the possibility of extending service to the proposed site, which would require an 800-foot extension . However, based on various GCEP/USEC shutdown scenarios, this utility may not be available since the full capacity of the steam plant may be dedicated to providing existing facilities with heat. Reliable is projected to be good.

D.3.8 SEWAGE

The X-6619 Sewage Treatment Plant has a design capacity of 700,000 gal/day and currently has 400,000 gal/day excess capacity available at a rate of $4.755 per 1000 gal. Sewer lines are available adjacent to the site. The system is very reliable.

D.3.9 STORM WATER DRAINAGE SYSTEM

The storm water management system was installed when the proposed site was rough graded in the mid 1950s and again in the early 1980s. Cost would be maintenance driven. Reliability is fair.

D.3.10 COMPRESSED AIR

The available capacity is 1500 scfm and reliability is rated as good.

D.3.11 NITROGEN

Nitrogen is supplied in liquid bulk form and service to the proposed site would require a bulk tank instillation. Extension of existing facilities not believed suitable.

D.4. UTILITY COSTS

See Chap. D.3.

D.5. SITE UTILITY DRAWINGS

Drawing No.	System
X-616-10M	Utility Site Plan & Details
X-2215A-1999-E	Underground Power Distribution System
X-2215B-2001-E	Underground Power Distribution – Area I
X-2215B-2004-E	Underground Power Distribution – Area 4
X-2215B-2011-E	Underground Power Distribution – Area II
X-2220D-3011-E	Underground Communication – Area II
X-2220D-3001-E	Underground Communication – Area I
X-2220D-3004-E	Underground Communication – Area 4
X-2230B-16-C	Sanitary Sewer System
X-230A-2006-M	Temp. & Perm. Water Line
X-230A-79-M	Sanitary Fire Water System
X-230A-28-C	Sanitary & Fire Water System
X-230B 78-C	Sewage System
X-230B 77-C	Sewage System
X-230C-1.9.-C	Plant Storm Drain System
X-230G-4M	R.C.W. Waste Line
X-230G-5M	R.C.W. Waste Line
X-5015-9C	345 U.G. System
X-5015-9.1C	345 kV U.G. System
X-5015-1C	345 kVU.G. System
X-5015-1.1C	345 kVU.G. System
X-5015-10C	345 kVU.G. System
X-2230-23-C	Underground Piping
X-2230-20-C	Underground Piping

D.6. UTILITY TIE-IN POINTS

The locations of the tie in points for the utilities are discussed in Chap. D.3 and are shown on the utility drawings.

SEQUENCE NO. 10369

INFORMATION

REV. NO.	ISSUE PURPOSE	A-E	Operator	A.E.C.
1	REMOVED PIPE ADDED REF DWG		4/17/80	
O	CERTIFIED FOR CONSTRUCTION	11-22-74	J.A.B. 11-22-74	J.T.M. 11-22-74
B	APPROVED TITLE II	10-24-74	—	—
A	FOR APPROVAL TITLE II	9-3-74	JAB 9-27-74	J.T.M. 10-23-74
			APPROVED-INITIALS & DATE	

UNITED STATES
ATOMIC ENERGY COMMISSION

Giffels Associates, Inc.
Architects Engineers Planners
AEC Contract No. AT-(40-1)-4517
Detroit, Michigan 48226
GA Project No. 73957

DRAWING TITLE

UTILITY SITE PLAN AND DETAILS

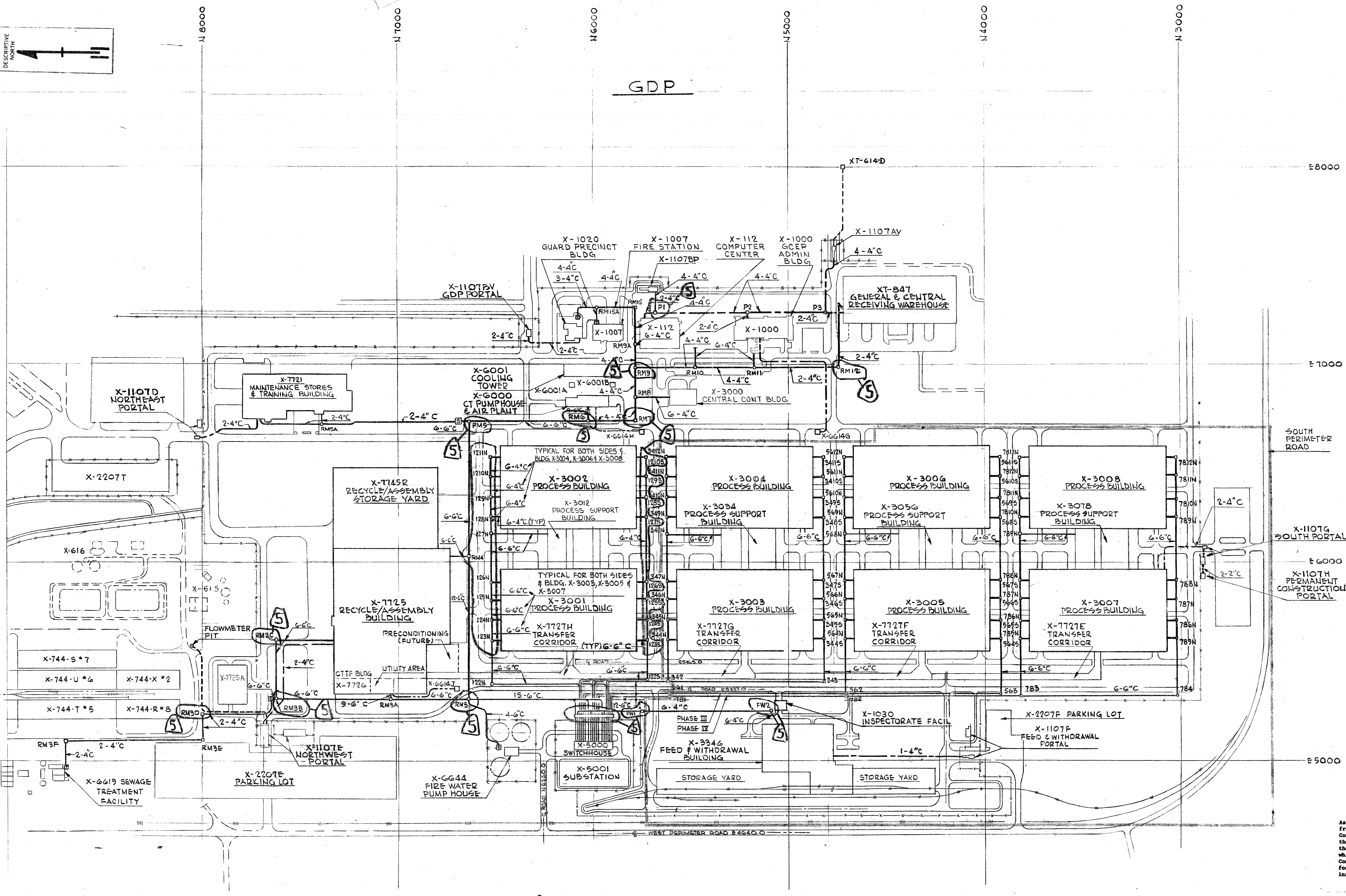
DRAWING APPROVED-DATE: 9-3-74 ARCHITECT ENGINEER
DRAWING APPROVED-DATE: J. BRACKEY 9-27-74 OPERATOR
DRAWING APPROVED-DATE: J. T. MILLOWAY 10-3-74 A.E.C. ENGINEER

DRAWN: J. Y. DATE 8/30/74 — CHECKED DATE 8/30/74 — SCALE 1"=50' HORIZ 1"=5' VERT
D.N.E. 8/30/74 — APPROVED DATE 8-30-74

PROJECT: PLT. LIQ. EFF. POLL. CONTR., PORTSMOUTH
DRAWING NUMBER: X-616-10M
REV. NO. 1

REFERENCE DWG FX-761-215M

Unclassified 12/8/77 By: S. H. Thomas



GDP
DESCRIPTIVE NORTH
N 8000
N 7000
N 6000
N 5000
N 4000
N 3000
E 8000
E 7000
E 6000
E 5000
XT-614-D
X-1107AY
X-1020 GUARD PRECINCT BLDG
X-1007 FIRE STATION
X-1107BP
X-112 COMPUTER CENTER
X-1000 GCEP ADMIN BLDG
XT-847 GENERAL & CENTRAL RECEIVING WAREHOUSE
X-1107BV GDP PORTAL
X-1107D NORTHEAST PORTAL
X-7721 MAINTENANCE STORES & TRAINING BUILDING
X-6001 COOLING TOWER
X-6000 CT PUMPHOUSE & AIR PLANT
X-3000 CENTRAL CONT BLDG
X-2207T
X-7745R RECYCLE/ASSEMBLY STORAGE YARD
X-3002 PROCESS BUILDING
X-3012 PROCESS SUPPORT BUILDING
X-3004 PROCESS BUILDING
X-3034 PROCESS SUPPORT BUILDING
X-3006 PROCESS BUILDING
X-3056 PROCESS SUPPORT BUILDING
X-3008 PROCESS BUILDING
X-3078 PROCESS SUPPORT BUILDING
X-1107G SOUTH PORTAL
X-1107H PERMANENT CONSTRUCTION PORTAL
SOUTH PERIMETER ROAD
X-7725 RECYCLE/ASSEMBLY BUILDING
X-3001 PROCESS BUILDING
X-7727H TRANSFER CORRIDOR
X-3003 PROCESS BUILDING
X-7727G TRANSFER CORRIDOR
X-3005 PROCESS BUILDING
X-7727F TRANSFER CORRIDOR
X-3007 PROCESS BUILDING
X-7727E TRANSFER CORRIDOR
PRECONDITIONING (FUTURE)
CTTF BLDG X-7726
UTILITY AREA
FLOWMETER PIT
X-616
X-615
X-744-S #7
X-744-U #6
X-744-X #2
X-744-T #5
X-744-R #8
X-7725A
X-1107E NORTHWEST PORTAL
X-2207E PARKING LOT
X-6619 SEWAGE TREATMENT FACILITY
X-6644 FIRE WATER PUMP HOUSE
X-5000 SWITCHHOUSE
X-5001 SUBSTATION
X-3346 FEED & WITHDRAWAL BUILDING
PHASE III
PHASE IV
X-1030 INSPECTORATE FACIL
X-2207F PARKING LOT
X-1107F FEED & WITHDRAWAL PORTAL
STORAGE YARD
STORAGE YARD
WEST PERIMETER ROAD E4640.0

NOTE: CONTRACTOR PERFORMS WORK IN ENCIRCLED AREAS ONLY. SEE DWG. 761-1135-E

LEGEND

- 13.8 KV DISTRIBUTION
- 480V DISTRIBUTION
- 480V DIRECT BURIAL CABLE
- 120V DIRECT BURIAL CABLE
- PAD MOUNTED DISCONNECT SWITCH
- 562 MANHOLE (TYP M.H. №)
- TRANSFORMER PAD
- 8 TYPICAL DUCT PROFILE NUMBER SEE PROFILE SHEETS
- TOD - TOP OF DUCT
- P1 480V HANDHOLES (TYP HANDHOLE №)

NOTES

1. MANHOLE NUMBERS RM1 & RM2 ARE NOT USED.
2. UNLESS OTHERWISE INDICATED ALL POWER CONDUIT STUB UPS SHALL BE 60" RADIUS BENDS & ALL SWEEPING TURNS SHALL BE 40'-0" RADIUS.
3. FOR KEY PLAN & ADDITIONAL NOTES SEE DWG. X-2215A-2000-E.

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INFORMATION ONLY

(QL) Lifetime Quality Records

REV	DESCRIPTION	A-E		OCPO	EPEO
5	ADDED SUMP PUMP PROJECT NO. 11368 C.F.C.		2/24/89		
4	AS BUILT	APR 11/22/85			
3	ADDED DUCT RUNS TO XT-847, CABLE TO XT-614-D	APR	3-1-83	RWB 3-1-83	HBH 3-1-83
2	REVISED ADMIN COMPLEX	APR	7/30/82	RWB 7/30/82	HBH 7/30/82
1	REVISED PER NEW LOCATION OF BLDG. X-7721	APR	5/19/81	N/R	N/R
0	CERTIFIED FOR CONSTRUCTION	APR	12/17/80	12/17/80	12-17-80

REVISION OR ISSUE PURPOSE — APPROVED-INITIALS & DATE

APPROVALS	DATE
A. WEXLER — DRAWN	2-12-79
C.S. CILIBERTI — CHECKED	7-2-80
D. Howe/csc — CHIEF	8/4/80
A. P. Rosa — A-E	12/17/80
R. J. Dantoni — OCPO	12/17/80
H. B. Haynes — EPEO ENGRG	12/17/80

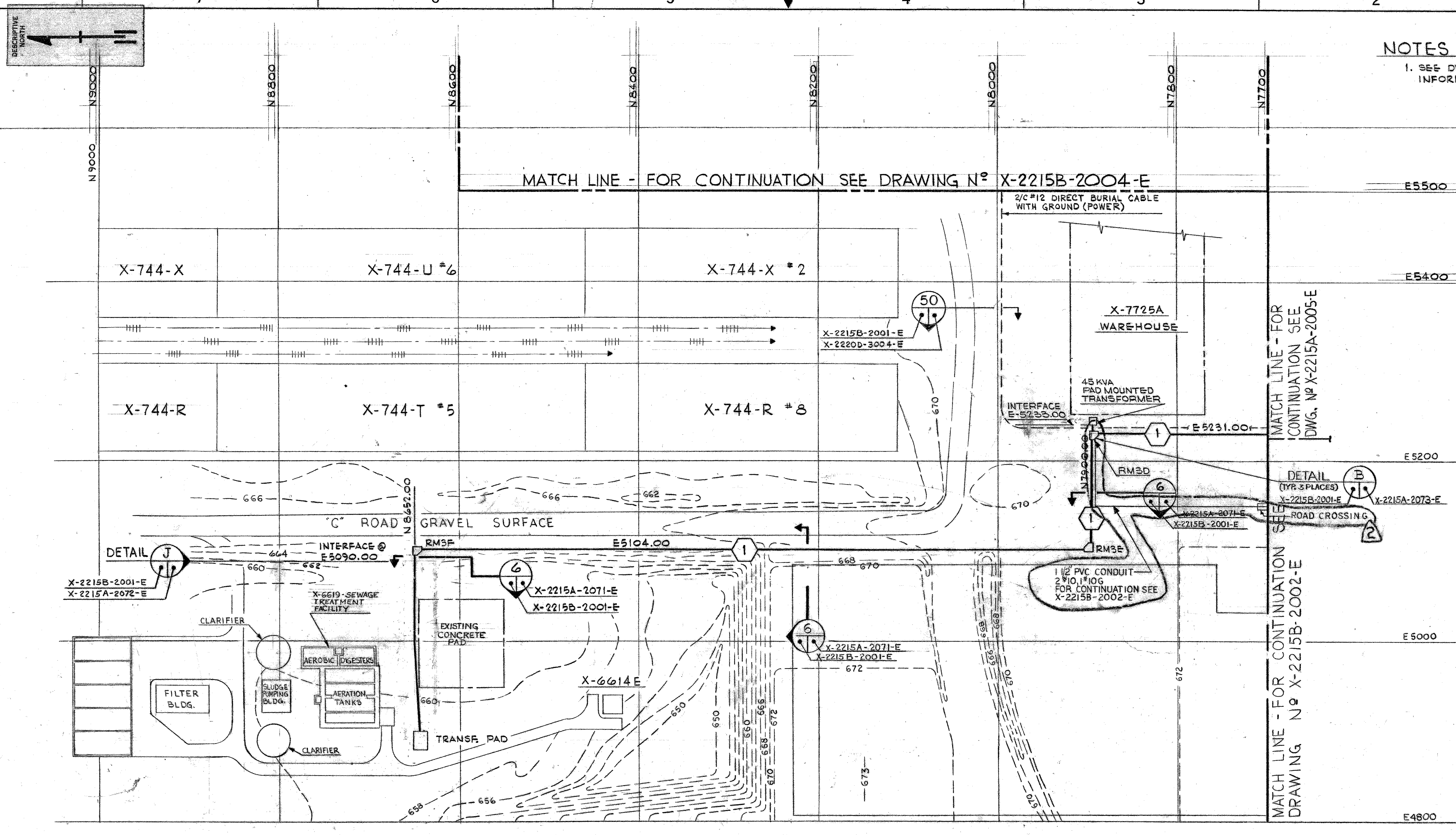
UNITED STATES DEPARTMENT OF ENERGY
CATALYTIC, INC.
PHILADELPHIA, PENNSYLVANIA
DE-AC05-76ET 05132 — CATALYTIC, INC. CONTRACT NO. 48115
PROJECT: GAS CENTRIFUGE ENRICHMENT PLANT
SUBPROJECT: OUTSIDE UTILITIES (518)
TITLE: UNDERGROUND POWER DISTRIBUTION SYSTEM
PLANT: PORTSMOUTH OHIO
TYPE: P
CLASS: U
SCALE: 1" = 200'-0"
ID: DP1-14
DWG. NO: X-2215A-1999-E
REV: 5

NOTES

1. SEE DWG X-2215A-1999-E FOR ADDITIONAL INFORMATION

PROFILE KEY

Nº	DWG. Nº
1	X-2215A-2051-E



NOTE: CONTRACTOR PERFORMS WORK IN ENCIRCLED AREA ONLY.

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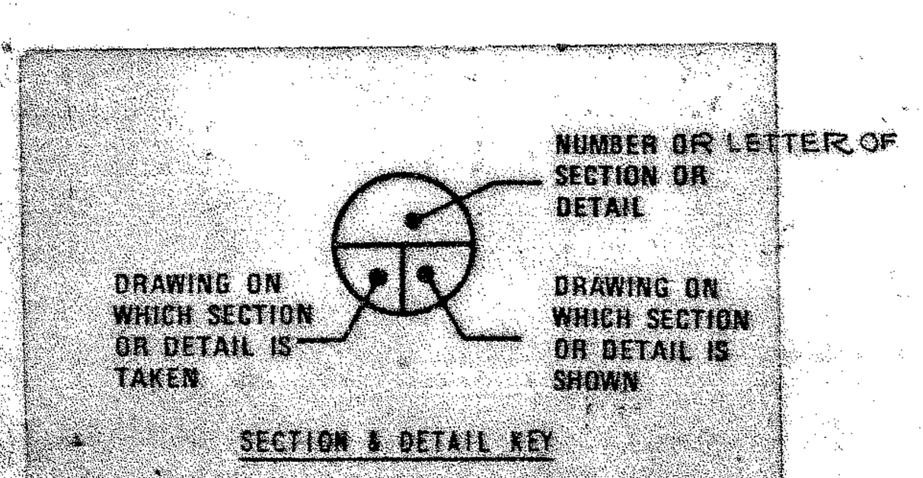
INFORMATION ONLY

(QL) Lifetime Quality Records



REV	DESCRIPTION	A-E		OCPO	EPEO
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1	AS BUILT	11/22/85			
0	CERTIFIED FOR CONSTRUCTION		12/17/80	12/17/80	12-17-80

REVISION OR ISSUE PURPOSE — APPROVED-INITIALS & DATE

APPROVALS	DATE
K. FLETCHER — DRAWN	8/16/79
C.S. CILIBERTI — CHECKED	7-2-80
CHIEF	8/4/80
A-E	12/17/80
OCPO	12/17/80
EPEO ENGRG	12/17/80

UNITED STATES DEPARTMENT OF ENERGY

CATALYTIC, INC.
PHILADELPHIA, PENNSYLVANIA

DE-AC05-76ET 05132 — CATALYTIC, INC. CONTRACT NO. 43115

PROJECT: GAS CENTRIFUGE ENRICHMENT PLANT

SUBPROJECT: OUTSIDE UTILITIES (518)

TITLE: UNDERGROUND POWER DISTR. PLAN - AREA 1

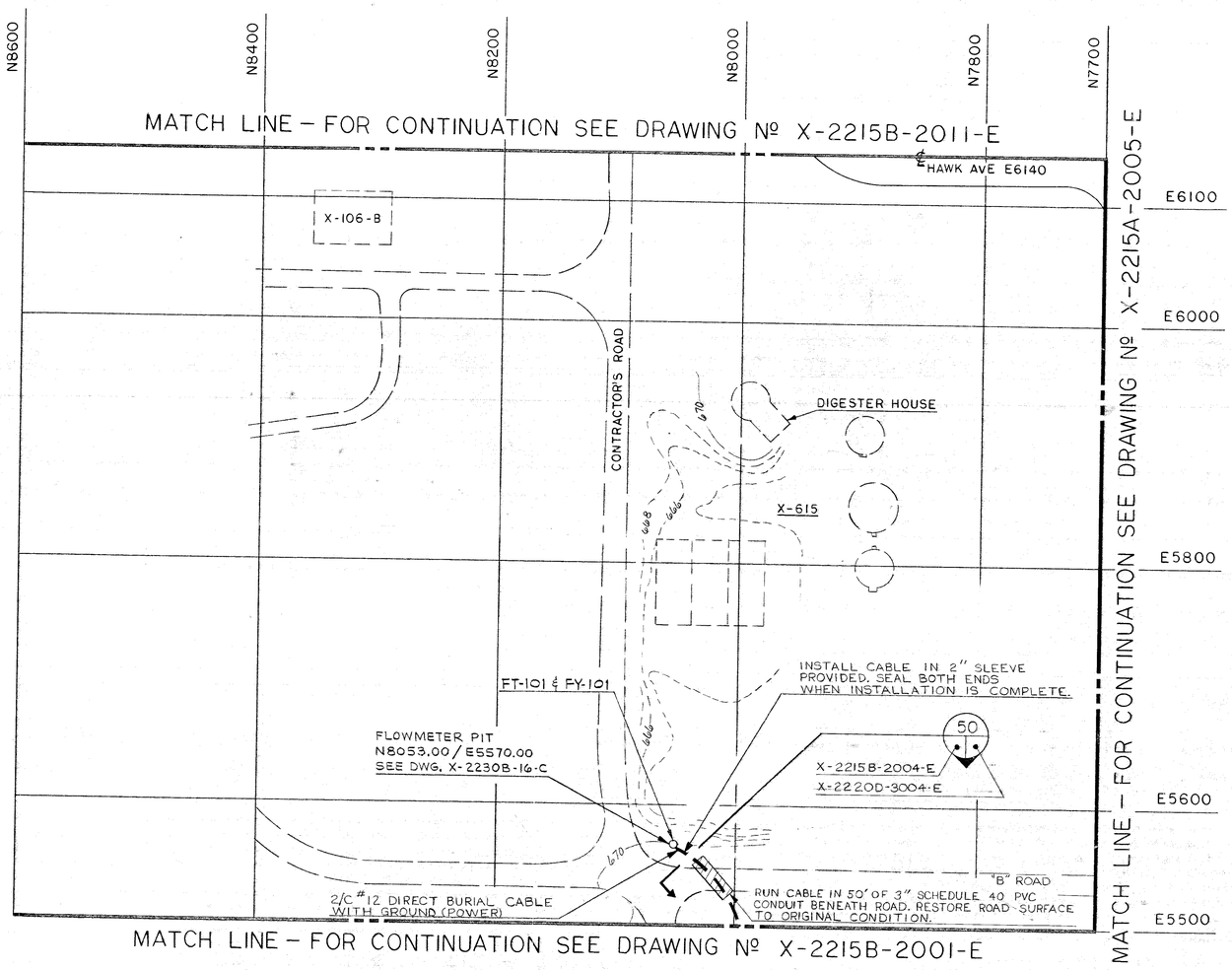
PLANT: PORTSMOUTH OHIO | BLDG | FLOOR | SHT | OF | TYPE P | CLASS U

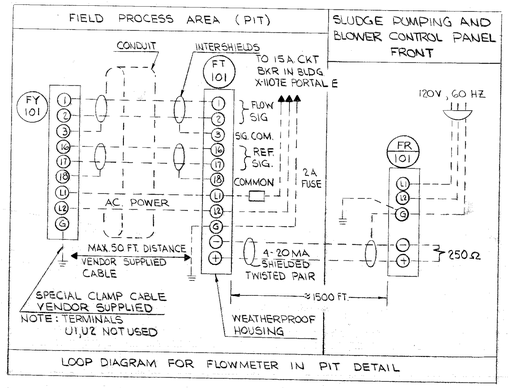
SCALE 1" = 50' | ID DPI-14 | DWG. NO X-2215B-2001-E | REV 2

DESCRIPTIVE NOTE

NOTES:

1. SEE DWG. X-2215A-2000-E FOR ADDITIONAL INFORMATION.
2. FOR INSTALLATION DETAIL OF FY-101, FT-101 & FIRQ-101, SEE DWG. X-2230B-16-C & X-6619-4-C1 DETAIL.





NUMBER OR LETTER OF SECTION OR DETAIL
DRAWING ON WHICH SECTION OR DETAIL IS TAKEN
DRAWING ON WHICH SECTION OR DETAIL IS SHOWN
SECTION & DETAIL KEY

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INFORMATION ONLY

"AS-BUILT DRAWING"

(QL) Lifetime Quality Records

REV	DESCRIPTION	A-E	OCPO	EPEO
	REVISION OR ISSUE PURPOSE	APPROVED-INITIALS & DATE		
1	AS BUILT			
0	CERTIFIED FOR CONSTRUCTION	10/17/80	10/17/80	10/17/80

APPROVALS	DATE
C. R. PAGLIOTTI DRAWN	9/16/80
C.S. CILIBERTI CHECKED	10-16-80
CHIEF	10/16/80
A. P. Rosa A-E	11/11/80
OCPO	11/17/80
EPEO ENGRG.	11/17/80

UNITED STATES
DEPARTMENT OF ENERGY
CATALYTIC, INC.
PHILADELPHIA, PENNSYLVANIA
DE-AC05-76ET 05132 CATALYTIC, INC. CONTRACT NO. 43115

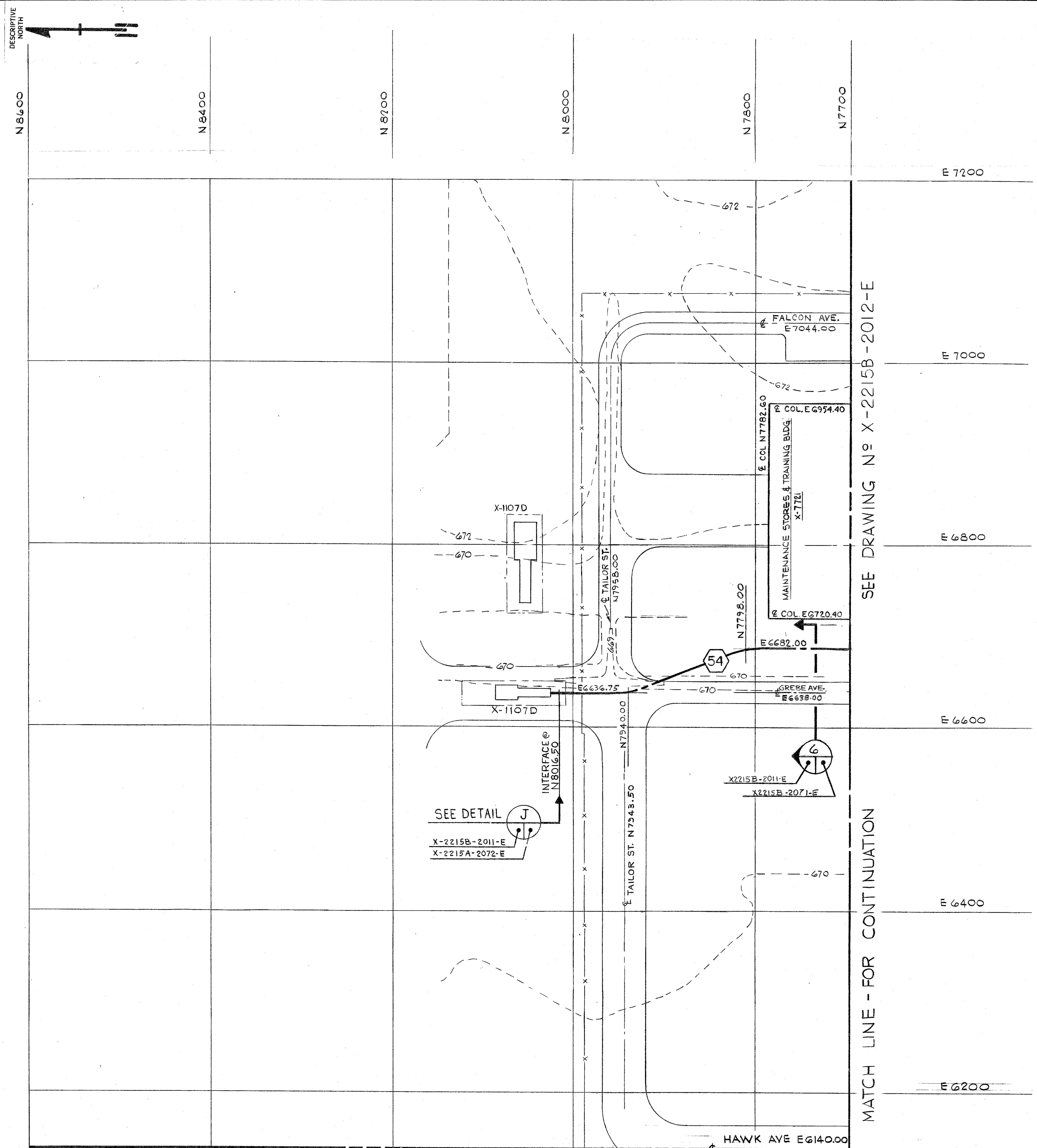
PROJECT GAS CENTRIFUGE ENRICHMENT PLANT
SUBPROJECT OUTSIDE UTILITIES (518)
TITLE UNDERGROUND POWER DISTR PLAN – AREA 4

PLANT	BLDG	FLOOR	SHT	OF	TYPE	CLASS
PORTSMOUTH OHIO					P	U

SCALE 1"=50' ID DPI-14 DWG. NO. X-2215B-2004-E REV. 1

DATE | STAGE | NO. PTS | PRINT RECORD

N30174



MATCH LINE - FOR CONTINUATION SEE DWG. Nº X-2215B-2004-E

NOTES

1. SEE DWG X-2215A-1999-E FOR ADDITIONAL INFORMATION.

PROFILE KEY

Nº	DWG. Nº
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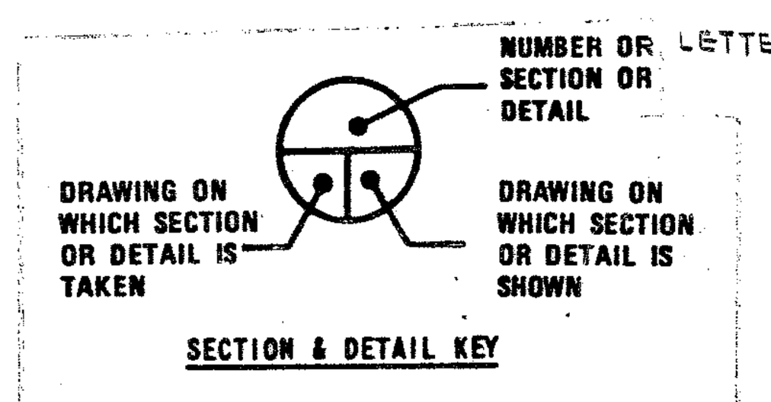

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INFORMATION ONLY

"AS-BUILT DRAWING"

(QL) Lifetime Quality Records

DATE	STAGE	NO. PTS.
PRINT RECORD		

REV	DESCRIPTION	A-E		OCPO	EPEO
3	AS BUILT	APR 11/22/85			
2	REVISED 480V POWER DUCT. ALSO REVISED BLDG. X-7721 LOCATION PER LATEST INFO.	APR/HR	2/12/82	N/R	N/R
1	REVISED BLDG. X-7721 PER NEW LOCATION	UPR	5/14/81	N/R	N/R
0	CERTIFIED FOR CONSTRUCTION	UPR	12/19/80	RJD 12/17/80	12-17-80
	REVISION OR ISSUE PURPOSE	APPROVED-INITIALS & DATE			

APPROVALS	DATE
R. MABRY — DRAWN	7/20/79
C.S. CILIBERTI — CHECKED	7-7-80
D. Howe/CSC — CHIEF	8/4/80
A. P. Rosa — A-E	12/17/80
R. J. D'Antoni — OCPO	12/17/80
H. B. Haynes — EPEO ENGRG	12/17/80

UNITED STATES DEPARTMENT OF ENERGY

CATALYTIC, INC.
PHILADELPHIA, PENNSYLVANIA

DE-AC05-76ET 05132 — CATALYTIC, INC. CONTRACT NO. 43115

PROJECT: GAS CENTRIFUGE ENRICHMENT PLANT

SUBPROJECT: OUTSIDE UTILITIES (518)

TITLE: UNDERGROUND POWER DISTR. PLAN - AREA 11

TYPE: P — CLASS: U

PLANT: PORTSMOUTH OHIO — BLDG — FLOOR — SHT — OF

SCALE: 1" = 50' — ID: DPI-14 — DWG. NO: X-2215B-2011-E — REV: 3

252

DESCRIPTIVE NORTH

N9000 N8800 N8600 N8400 N8200 N8000 N7800 N7700

MATCH LINE — FOR CONTINUATION SEE DRAWING Nº X-2220D-3004-E

E5500 E5400 E5200 E5000 E4800

X-744-X | X-744-U #6 | X-744-X #2

X-744-R | X-744-T #5 | X-744-R #8

2/C #14 TWISTED PR. SHIELDED DIRECT BURIAL CABLE (SIGNAL FROM FLOWMETER) RUN TO X-6619 SCREEN BLDG. VIA SPARE CONDUITS IN DUCTS BETWEEN M.H. C1A & SCREEN BLDG

50 — X-2220D-3004-E, X-2220D-3001-E

X-7725G WAREHOUSE

INTERFACE @ E 5240.50

2"C. EXTENDED 8' FROM WALL OF C1A. SEAL END OF CONDUIT AFTER INSTALLATION OF CABLE

C1A — 101 — E5237.00

MATCH LINE FOR CONTINUATION SEE DRAWING Nº X-2220D-3005-E

3 — RAISE MANHOLE 2" MIN ABOVE GRADE SEE DWG DX-761-H35 FOR HEIGHT

"C" ROAD GRAVEL SURFACE

E 5110.00 — 101 — N7960.00

G — X-2220D-3071-E, X-2220D-3001-E

DETAIL A (TYP) 2-PLACES — X-2220D-3001-E, X-2220D-3072-E

FLOWMETER CABLE TO SCREEN BLDG. SEE DWG. X-6619-3-E. INSTALL NEW 3/C #10 CABLE IN SAME DUCT WITH FLOWMETER CABLE TO X-6619, SEE X-6619-3-E

SEE DETAIL J — INTERFACE @ E 5090.00 — X-2220D-3001-E, X-2215A-3072-E

6A — X-2220D-3071-E, X-2220D-3001-E

G — X2220D-3001-E, X-2220D-3071-E

N8670.00

EXISTING CONCRETE PAD

CLARIFIER

AEROBIC DIGESTERS

SLUDGE PUMPING BLDG.

AERATION TANKS

FILTER BLDG.

SCREEN BLDG.

CLARIFIER

X-6614E

X-6619 SEWAGE TREATMENT FACILITY

NOTES

1. SEE DWG. X-2220D-1998-E FOR ADDITIONAL INFORMATION.

PROFILE KEY

Nº	DWG. Nº
101	X-2220D-3051-E

3 — NOTE: CONTRACTOR PERFORMS WORK IN ENCIRCLED AREA ONLY.

NUMBER OR LETTER OF SECTION OR DETAIL

DRAWING ON WHICH SECTION OR DETAIL IS TAKEN

DRAWING ON WHICH SECTION OR DETAIL IS SHOWN

SECTION & DETAIL KEY

REV	DESCRIPTION				
	REVISION OR ISSUE PURPOSE	APPROVED-INITIALS & DATE			
3	ADDED SUMP PUMP PROJECT NO. 11368 C.F.C.		Jan 2/24/84		
2	AS BUILT	11/2 7-1-81			
1	ADDED N.I.C. AREA TO X-7725A WAREHOUSE				
0	CERTIFIED FOR CONSTRUCTION	C.W.K.	12/17/80	2/26 12/17/80	W.K. 12-17-80
		A-E		OCPO	EPEO

APPROVALS	DATE
S.C. WOIDILL DRAWN	8/17/79
C.S. CILIBERTI CHECKED	7-15-80
D. Howe / CSC CHIEF	8/4/80
A. P. Rosa A-E	12/17/80
R. J. D'Antoni OCPO	12/17/80
J.B. Hooper EPEO ENGRG	12/18/80

As-Built drawings by Catalytic, Inc. are prepared from information furnished by the Construction Contractor. Catalytic signature (or initial) in the "As-Built" revision block namely attests to the fact that Catalytic has added these revisions which have been provided to Catalytic by the Contractor. Catalytic, Inc. is not responsible for the accuracy or authenticity of the as-built information.

INFORMATION ONLY

(QL) Lifetime Quality Records

DATE | STAGE | NO. PTS. — PRINT RECORD

UNITED STATES DEPARTMENT OF ENERGY

CATALYTIC, INC. PHILADELPHIA, PENNSYLVANIA

DE-AC05-76ET 05132 — CATALYTIC, INC. CONTRACT NO. 43115

PROJECT: GAS CENTRIFUGE ENRICHMENT PLANT

SUBPROJECT: OUTSIDE UTILITIES (518)

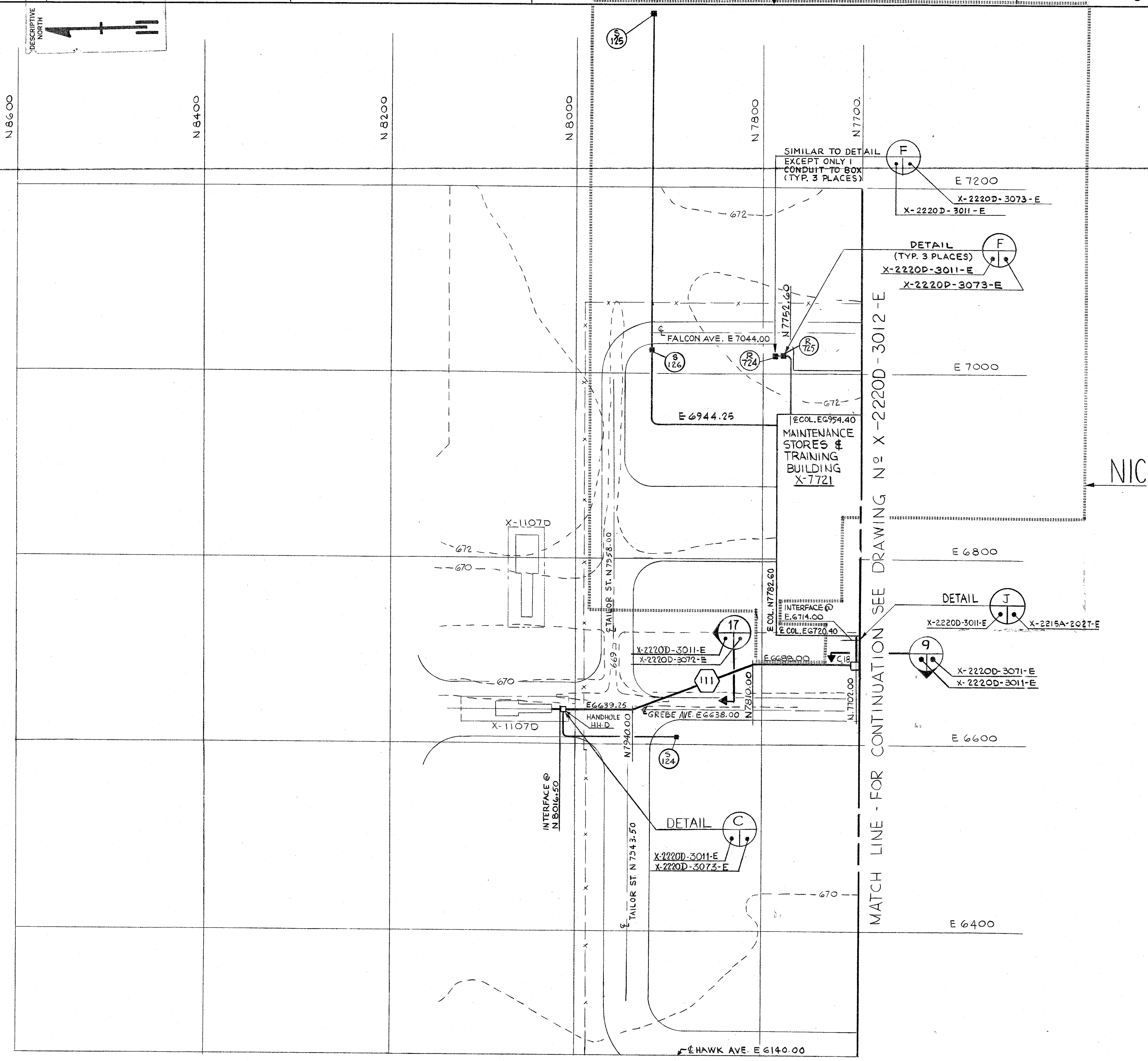
TITLE: UNDERGROUND COMMUNICATIONS PLAN - AREA I

TYPE P — CLASS U — REV 3

PLANT PORTSMOUTH OHIO | BLDG | FLOOR | SHT | OF

SCALE 1" = 50' — ID DPI-14X-2220D-3001-E — DWG. NO

N30774



NOTES

1. SEE DWG. X-2220D-1998-E FOR ADDITIONAL INFORMATION.

PROFILE KEY

Nº	DWG. Nº
111	X-2220D-3053-E

POST INDICATOR VALVE FWD PIPING LOCATIONS			
VALVE Nº	NORTH CO-ORDINATE	EAST CO-ORDINATE	REMARKS
S124	7885.00	6614.00	
S126	7920.00	7026.50	
S125	7920.00	7386.00	
R724	7790.50	7022.00	
R725	7787.00	7022.00	

NIC

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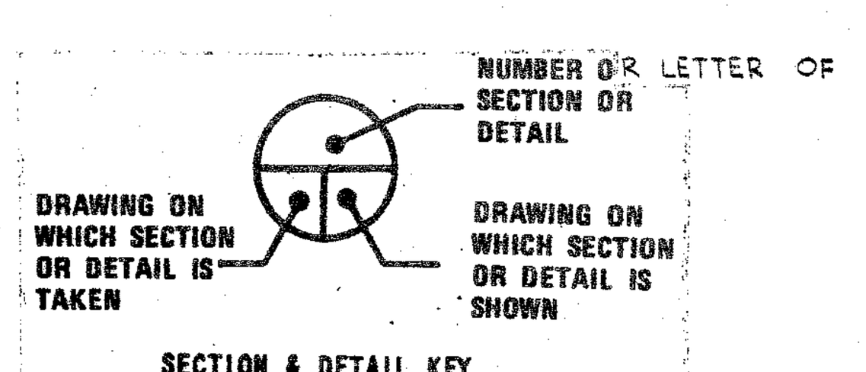
INFORMATION ONLY

"AS-BUILT DRAWING"

(QL) Lifetime Quality Records

DATE	STAGE	NO. PTS.
PRINT RECORD		



REV	DESCRIPTION	A-E		OCPO	EPEO
4	AS BUILT	APR 11/22/85			
3	ADDED P.I.V.'S R721, R724, & R725 AND CONDUIT RUN FROM THESE VALVES & BLDG X-7721; ALSO REV. BLDG. LOC. PER LATEST INFO. ADDED DETAIL J REF.	APR/HCB	2/12/82	N/R	N/R
2	ADDED SECTIONALIZING VALVE S125 & CONDUIT RUN FROM THIS VALVE AND S126 TO X-7721 HCB	APR	7/28/81	N/R	N/R
1	REVISED BLDG. X-7721 PER NEW LOCATION HCB	APR	5/14/81	N/R	N/R
0	CERTIFIED FOR CONSTRUCTION	APR	12/17/80	12/17/80	12-17-80
	REVISION OR ISSUE PURPOSE	APPROVED-INITIALS & DATE			

APPROVALS	DATE
K. FLETCHER DRAWN	8/2/79
C.S. CILIBERTI CHECKED	7-16-80
D. Howe / CSC CHIEF	8/4/80
A. P. Rosa A-E	12/17/80
R. J. D'Antoni OCPO	12/17/80
A. B. Haynes EPEO ENGRG	12/17/80

UNITED STATES
DEPARTMENT OF ENERGY
CATALYTIC, INC.
PHILADELPHIA, PENNSYLVANIA
DE-AC05-76ET 05132 CATALYTIC, INC. CONTRACT NO. 43115
PROJECT GAS CENTRIFUGE ENRICHMENT PLANT
SUBPROJECT OUTSIDE UTILITIES (518)
TITLE UNDERGROUND COMMUNICATIONS PLAN - AREA II

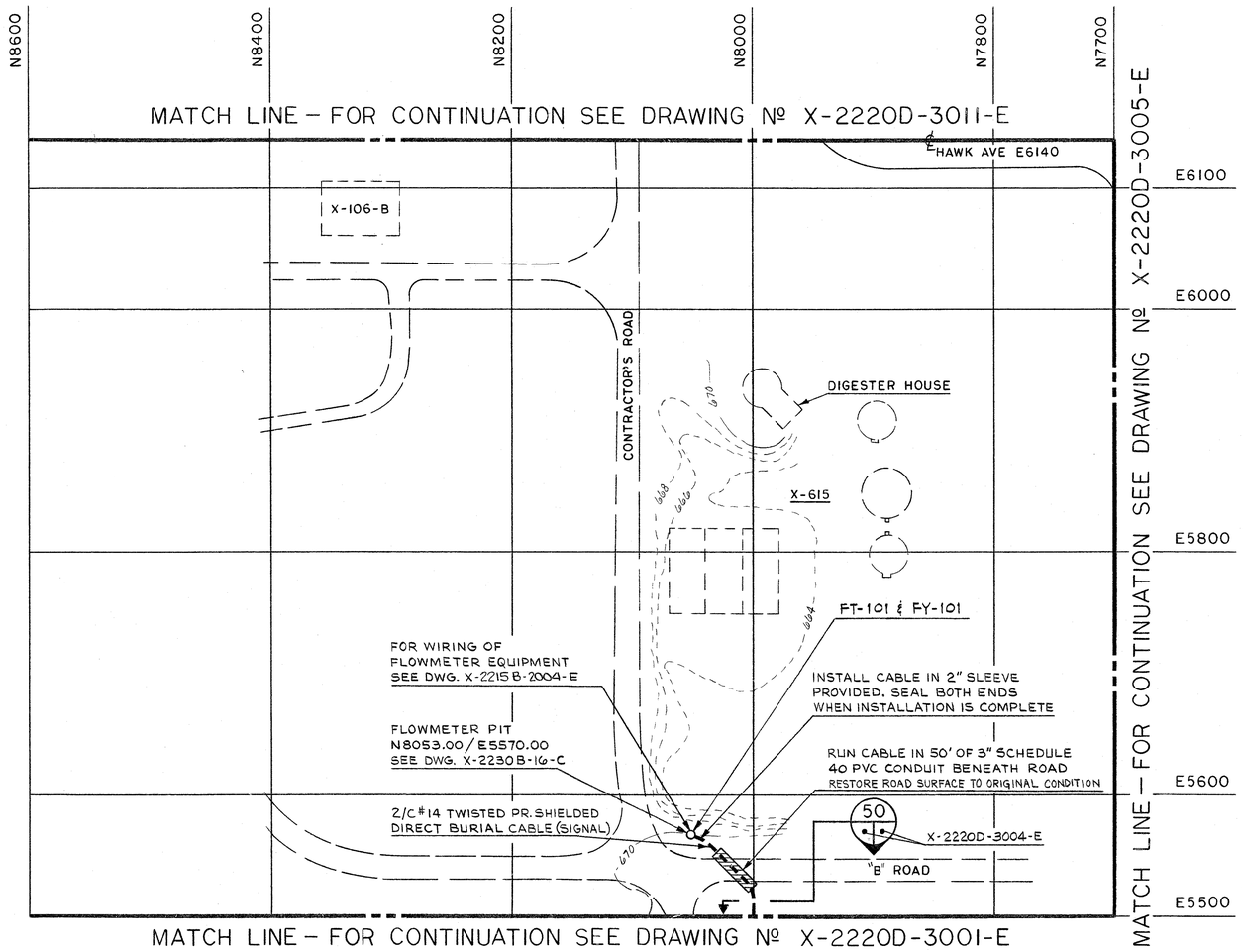
TYPE	PLANT	BLDG	FLOOR	SHT	OF	CLASS
P	PORTSMOUTH OHIO					U

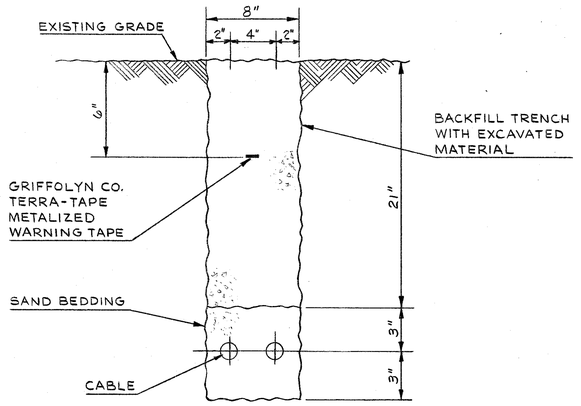
SCALE	ID	DWG. NO	REV
1"=50'	DPI-14	X-2220D-3011-E	4

DESCRIPTIVE NORTH

NOTES:

1. SEE DWG. X-2215A-2000-E FOR ADDITIONAL INFORMATION.





SECTION 50 N.T.S.
POWER & COMMUNICATIONS PLANS — X-2220D-3004-E

TYPICAL CROSS SECTION OF DIRECT BURIED CABLE

NUMBER OR LETTER OF SECTION OR DETAIL
DRAWING ON WHICH SECTION OR DETAIL IS TAKEN
DRAWING ON WHICH SECTION OR DETAIL IS SHOWN
SECTION & DETAIL KEY

IMFORMATION ONLY

As-Built drawings by Catalytic, Inc. are prepared from information furnished by the Construction Contractor. Catalytic signature (or initial) in the "As-Built" revision block namely attests to the fact that Catalytic has added these revisions which have been provided to Catalytic by the Contractor. Catalytic, Inc. is not responsible for the accuracy or authenticity of the as-built information.

"AS-BUILT DRAWING"

(QL) Lifetime Quality Records

DATE	STAGE	NO. PTS.
PRINT RECORD		

REV	DESCRIPTION	A-E	OCPO	EPEO
	REVISION OR ISSUE PURPOSE	APPROVED-INITIALS & DATE		
1	AS BUILT	11/4/85		
0	CERTIFIED FOR CONSTRUCTION	12/7/80	12/17/80	

APPROVALS	DATE
C. R. PAGLIOTTI DRAWN	9/18/80
C.S. CILIBERTI CHECKED	10-16-80
D. Norris CHIEF	11/4/80
A. P. Rosa A-E	12/11/80
R. J. Dantoni OCPO	12/11/80
A. B. Thayer EPEO ENGRG.	12/11/80

UNITED STATES
DEPARTMENT OF ENERGY
CATALYTIC, INC.
PHILADELPHIA, PENNSYLVANIA
DE-AC05-76ET 05132 CATALYTIC, INC. CONTRACT NO. 43115

PROJECT GAS CENTRIFUGE ENRICHMENT PLANT
SUBPROJECT OUTSIDE UTILITIES (518)

TITLE UNDERGROUND COMMUNICATIONS PLAN — AREA 4

TYPE D | CLASS U | REV 1

PLANT PORTSMOUTH OHIO | BLDG | FLOOR | SHT | OF

SCALE 1"=50' | ID DPI-14 | DWG NO X-2220D-3004-E

N30174

252

NOTES:

1. FOR GENERAL NOTES AND LEGEND SEE DWG. NO. X-2230-14-C
2. FOR SCHEDULE OF MANHOLES SEE DWG. NO. X-2230B-10-C
3. EXISTING ELECTRICAL POLES #1400, 1401, & 1402 TO BE SUPPORTED OR RELOCATED AS REQUIRED DURING CONSTRUCTION OF SSUP.

INFORMATION ONLY — UNCLASSIFIED / NOT UCNI — Anthony Sabrcono ADC 4052 Review Date: 1-19-00

As-Built drawings by Catalytic, Inc. are prepared from information furnished by the Construction Contractor. Catalytic signature (or initial) in the "As-Built" revision block merely attests to the fact that Catalytic has added these revisions which have been provided to Catalytic by the Contractor. Catalytic, Inc. is not responsible for the accuracy or authenticity of the as-built information.

"AS-BUILT DRAWING"

(QL) Lifetime Quality Records

REV	DESCRIPTION	A-E	OCPO	EPEO
1	AS BUILT			
0	CERTIFIED FOR CONSTRUCTION			

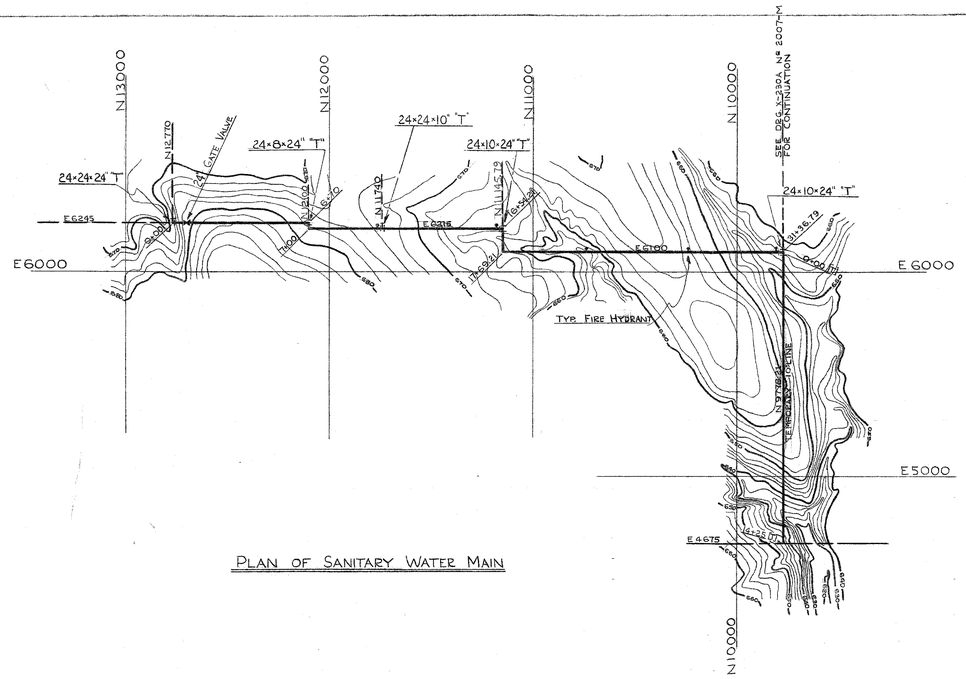
REVISION OR ISSUE PURPOSE — APPROVED-INITIALS & DATE

APPROVALS: J. FILLER, DRAWN 8-1-80; CHECKED; CHIEF; A-E; OCPO; EFEO ENGRG

UNITED STATES DEPARTMENT OF ENERGY
CATALYTIC, INC.
PHILADELPHIA, PENNSYLVANIA
DE-AC05-76ET 05132 — CATALYTIC, INC. CONTRACT NO. 4315
PROJECT: GAS CENTRIFUGE ENRICHMENT PLANT
SUBPROJECT: OUTSIDE UTILITIES (518)
TITLE: UNDERGROUND PIPING — SANITARY SEWER SYSTEM PLAN, PROFILE & DETAILS
SCALE: AS NOTED — ID: DPI-14 — PLANT: PORTSMOUTH OHIO — DWG. NO. X-2230B-16-C — REV 1 — TYPE P — CLASS U

SHEET 2006-M

1/2



PLAN OF SANITARY WATER MAIN

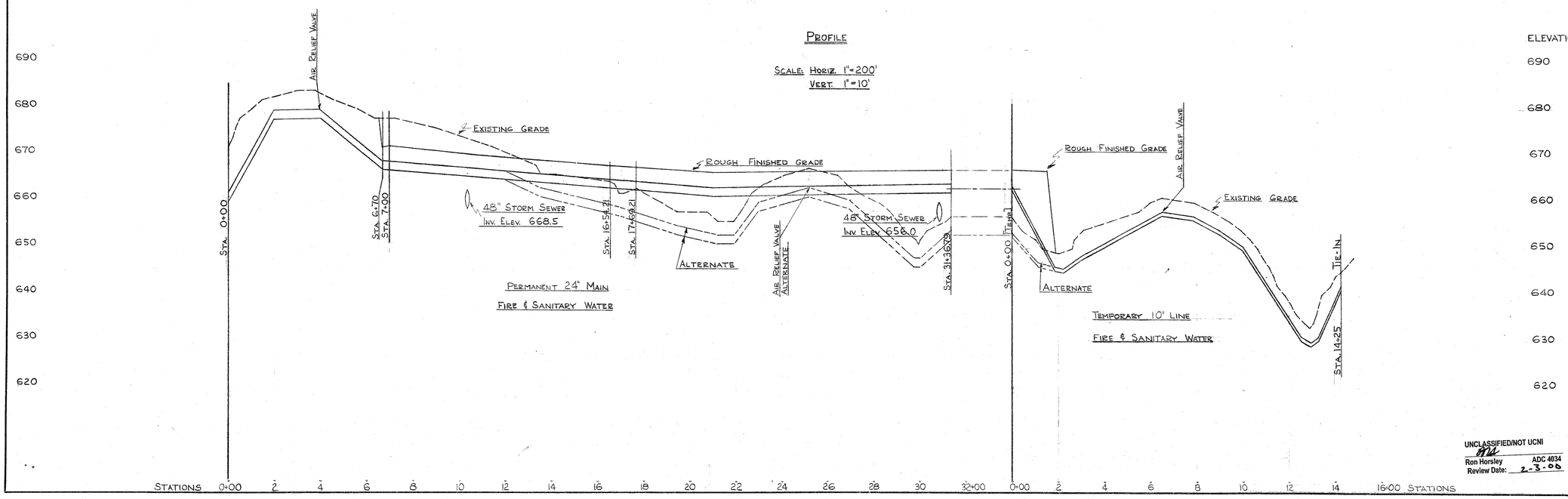
N

SCALE: 1"=300'

SEE DRAWING X-230A Nº 2005 M DATED 12-5-52 FOR PROPOSED OVERALL PLANNING

PROFILE

SCALE: HORIZ. 1"=200'
VERT. 1"=10'



UNCLASSIFIED/NOT UCNI

Ron Horsley ADC 4034
Review Date: 2-3-00

7398

INFORMATION ONLY

REV. No.	ISSUE PURPOSE	BY	A. E. S DATE	OPERATOR & DATE	A. E. C. & DATE
○	AS BUILT AS RECV'D FROM A-E WAS REV ○ DATED 12-9-52	By		R.P.H 12-12-52	

UNITED STATES
ATOMIC ENERGY COMMISSION

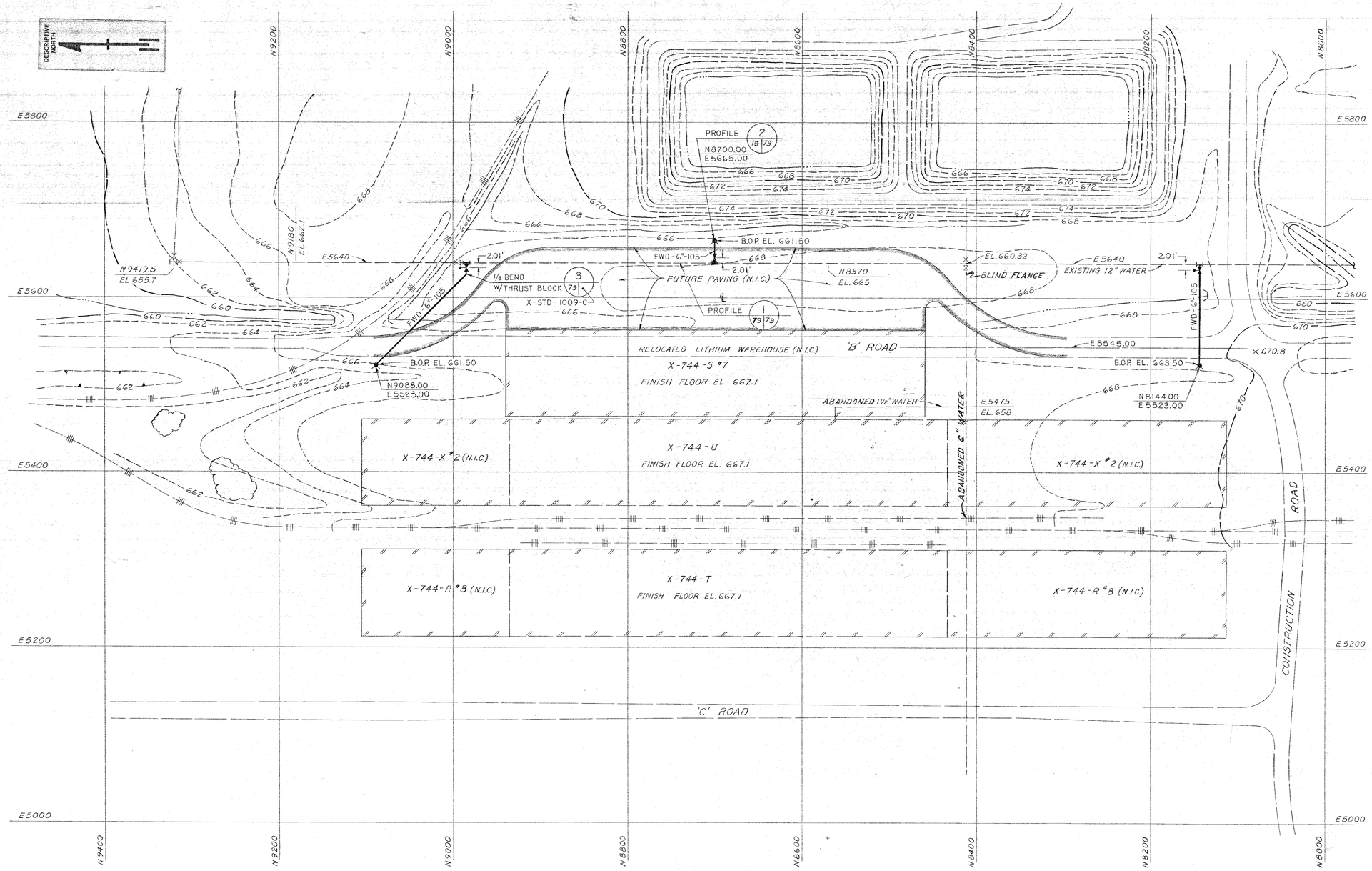
A. M. KINNEY, INC.
CONSULTING ENGINEERS CINCINNATI 19, OHIO
A. E. C. CONTRACT No. AT-(40-1)-1373

DRAWING TITLE

TEMP. & PERM. WATER LINE-PLAN & PROFILE STA. 0+00-31+36.79 & STA. 0+00T-14+25T

DRAWING APPROVED DATE	DRAWING APPROVED DATE	DRAWING APPROVED DATE
ARCHITECT-ENGINEER	CARBIDE & CARBON CHEMICALS CO.	A. E. C. ENGINEER

DRAWN	DATE	CHECKED	DATE	
Nancy Fay Clark	11-18-52	F.S. BANKES	12/9/52	114
IN CHARGE	DATE	CHIEF	DATE	
L.L. Bankes	12/9/52	J.K. Fava	12/9/52	
PROJECT	BUILDING	SHEET		
X SITE PORTSMOUTH AREA	X-230A	2006-M		



PLAN

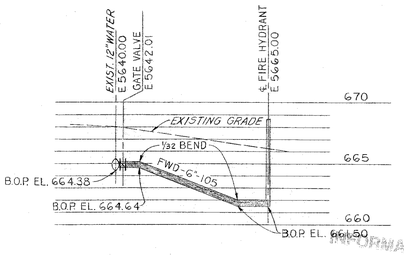
SCALE 1"= 50'

GENERAL NOTES

1. HORIZONTAL CONTROL IS BASED ON EXISTING PLANT COORDINATE SYSTEM. VERTICAL CONTROL IS BASED ON BENCHMARKS AND MONUMENTS TO BE PROVIDED BY G.A.T.
2. EXCAVATION, FILLING AND/OR BACKFILLING SHALL BE IN ACCORDANCE WITH CATALYTIC SPECIFICATION SECTION NO. 02200, ENTITLED 'EARTHWORK'.
3. FOR RELOCATED LITHIUM WAREHOUSES, SEE DRAWING NOS. X-744-2001-C, X-744-2003-C, X-744-2005-C & X-744-2010-C; PREPARED BY THE PORTSMOUTH AREA OFFICE.
4. FOR DETAILS OF FIRE HYDRANT CONNECTIONS, SEE DETAIL NO. 5, DRAWING NO. X-STD-1009-C, EXCEPT THAT ALL HYDRANT CONNECTIONS MADE UNDER THIS PLAN ARE TO BE MADE WITHOUT DISRUPTING SERVICE, USING A CLOW F-5205 M.J. TAPPING SLEEVE; AND A CLOW F-5093 M.J. VALVE.
5. FOR DETAILS OF THRUST BLOCKS, SEE SCHEDULE, DRAWING NO. X-STD-1009-C.
6. UNLESS OTHERWISE NOTED ON THE DRAWINGS, ALL PIPING MATERIALS AND INSTALLATION THEREOF, SHALL BE IN ACCORDANCE WITH SPECIFICATION SECTION NO. 02550, ENTITLED 'SITE UTILITIES - UNDERGROUND PIPING'.
7. FOR DETAILS OF POST INDICATOR VALVE, SEE DETAIL NO. 6, DRAWING NO. X-STD-1009-C.

LEGEND

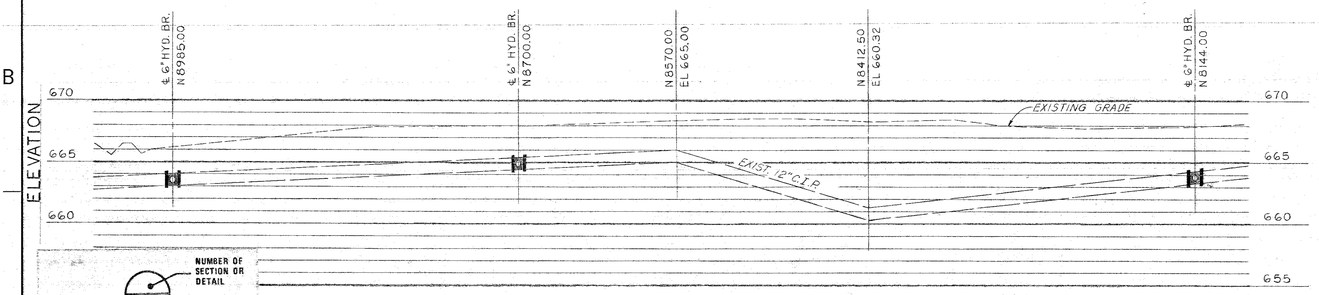
- 660 — EXISTING CONTOUR LINE
- EXISTING WATER LINE
- EXISTING ROAD
- EXISTING RAILROAD ℄
- FUTURE PAVING (N.I.C.)
- EXISTING STRUCTURE
- NEW STRUCTURE (N.I.C.)
- EXISTING VALVE
- EXISTING FIRE HYDRANT
- (N.I.C.) 'NOT IN CONTRACT'
- FWD-6"-105 FIRE WATER DISTRIBUTION - SIZE - SPEC. NO.
- NEW GATE VALVE
- NEW POST INDICATOR VALVE
- NEW FIRE HYDRANT
- TREES



℄ PROFILE - 6" HYDRANT BRANCH (2 / 79 79)

SCALE: 1"= 50' HORIZ. 1"= 5' VERT.

— LOOKING NORTH ALONG N 8700.00 —



DRAWING ON WHICH SECTION OR DETAIL IS TAKEN: XT-847-2__-C
NUMBER OF SECTION OR DETAIL
DRAWING ON WHICH SECTION OR DETAIL IS SHOWN: XT-847-2__-C
SECTION & DETAIL KEY

℄ PROFILE - 12" WATER (1 / 79 79)

SCALE: 1"= 50' HORIZ. 1"= 5' VERT.

— LOOKING EAST ALONG E 5640.00 —

UNCLASSIFIED/NOT UCNI
Ron Horsley ADC 4034
Review Date: 2-3-78

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(QL) Lifetime Quality Records

"AS-BUILT DRAWING"

INFORMATION ONLY

REV	REVISION OR ISSUE PURPOSE	A-E	GAT	UCC-ND	DOE
1	AS BUILT	CEG, E.M.T.			
0	CERTIFIED FOR CONSTRUCTION				

APPROVED-INITIALS & DATE

APPROVALS	DATE
J.A. URBAN DRAWN	12/8/77
CHECKED	12/20/77
CHIEF	12/21/77
A-E	12/22/77
GAT	1/4/78
UCC-ND	—
A.L. WATKINS DOE ENGRG	12/26/77

UNITED STATES
DEPARTMENT OF ENERGY
CATALYTIC, INC.
PHILADELPHIA, PENNSYLVANIA
EY-76-C-05-5132 CATALYTIC, INC. CONTRACT NO. 42881
PROJECT: GAS CENTRIFUGE ENRICHMENT PLANT
SUBPROJECT CONSTRUCTION FACILITIES
TITLE SANITARY-FIRE WATER SYSTEM
RELOCATED LITHIUM WAREHOUSES
NEW HYDRANT LOCATIONS - PLAN AND PROFILE

TYPE	PLANT	BLDG	FLOOR	SHT	OF
P	PORTSMOUTH OHIO				

CLASS U

SCALE	ID	DWG. NO	REV
AS SHOWN	WBS-2	X-230A-79-M	1

X-530-A
X-530-D
SYO-H-1
SYO-H-2
SYO-H-3
X-530-F
530B
17-2/BP
17-H-1W
17-H-2W
17-H-3W
17-3
X-740
X-109-A
PATROL ROAD
X-748
X-108-E
X-2207-D
GANNET LOOP
X-1107-DP
HIPTD
H2PTD
X-1107-DV
HIPTB
GREBE AVE.
FALCON AVE.
TAILOR ST.
SECURITY FENCE
WASHINGTON AVE.
WA-H-1
WA-H-2
WA-1
X-7745-R
HAWK AVE.
RUSH ST.
X-7725
X-7725-A
STOCKTON
X-7726
X-7727-H
H2TF
PLOVER AVE.
HISTP
H2PTE
X-1107-EP
HIPTE
X-1107-EP
SHERMAN LOOP
INFORMATION ONLY
X-616
CR-H-1
CR-H-2
CR-H-3
CR-H-4
CR-H-5
CR-H-6
X-1108-B
T-6A
T-6B
T-6C
T-6D
T-6E
X-615
CONSTRUCTION ROAD
T-2
T-4
T-5
T-6
T-12
B-H-2S
V-8H-1S
V-8H-3S
B-H-1S
B-H-3S
"B" ROAD
X-744-S(7)
X-744-U(5)
X-744-T(6)
"A" ROAD
"C" ROAD
X-6619
X-6614-E
OVEC MICROWAVE TOWER
OVEC STORAGE YARD
TO OVEC ADM. BLDG.
GREBE AVE. (TRUCK ACCESS ROAD)
PRINCIPAL ACCESS ROAD
X-230-J-3
PERIMETER ROAD
MIDWEST CONTRACTORS ACCESS ROAD
SECURITY FENCE
SCALE: 1"=100'
N-10000
N-9000
N-8000
N-7000
E-7000
E-6000
E-5000

LEGEND:

- S-21E — GATE VALVE
- POST INDICATOR VALVE (SECTION)
- 30-H-12W — POST INDICATOR VALVE (FIRE) / FIRE HYDRANT
- GCEP TEMPORARY FIRE WATER
- CAPPED

KEY PLAN

9	6	3
8	5	2
7	4	1

GOODYEAR ATOMIC CORPORATION
P. O. BOX 628
PIKETON, OHIO 45661
ACTING UNDER CONTRACT EY-76-C-05-0001 WITH THE U.S. DEPARTMENT OF ENERGY

REV	DESCRIPTION	DOE	DATE	APPD	DATE
2	REMOVED FIRE HYDRANT CR-H-2			LKM	11-14-86
1	GENERAL REVISION			LKM	7-9-86
0	APPROVED FOR RELEASE			SAS	4-18-83

REFERENCE:

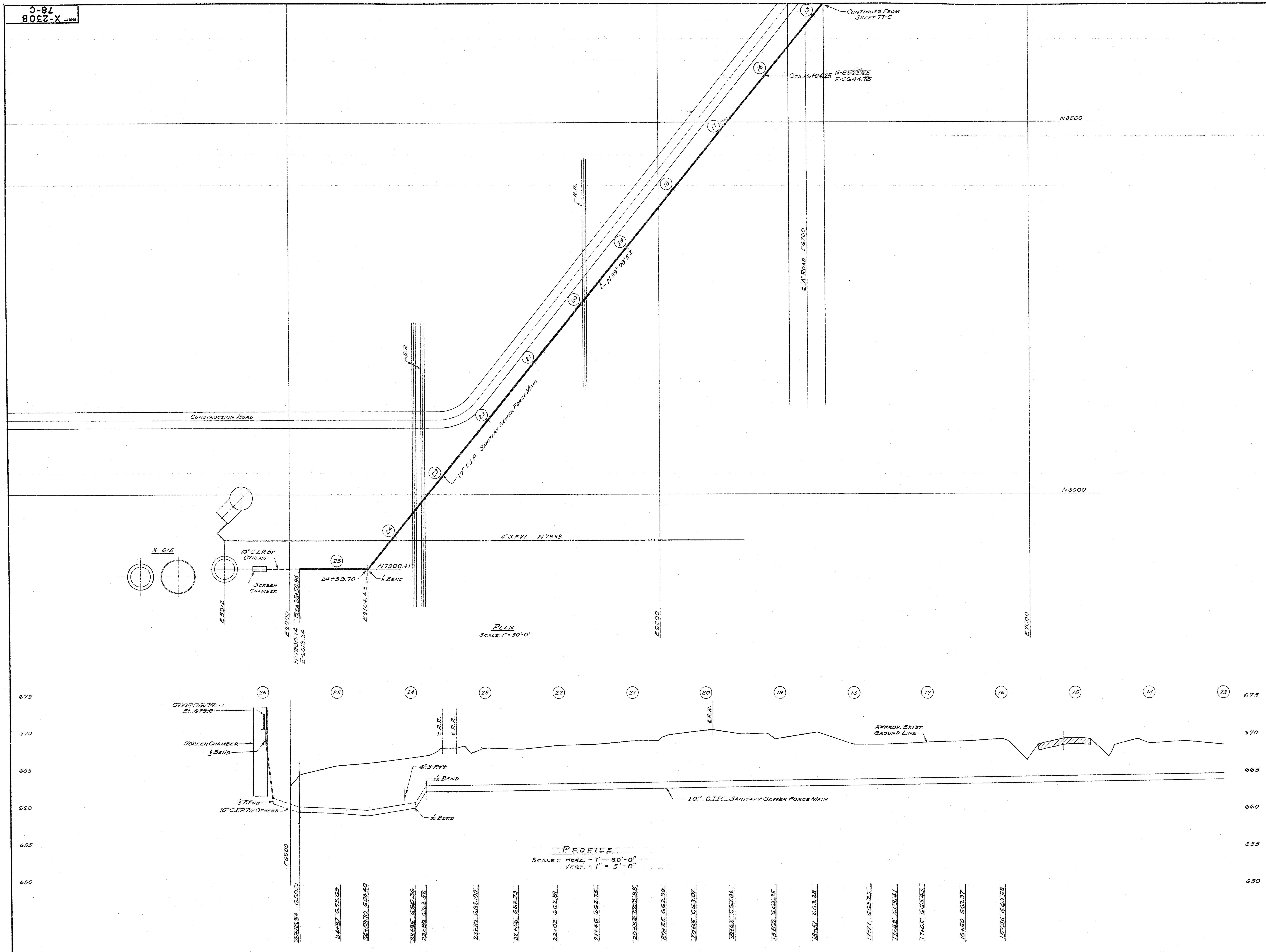
UNCLASSIFIED/NOT UCNI
Ron Hirsley ADC 4034
Review Date: 2-3-00

SUBJECT MATTER PROPERTY OF GOODYEAR ATOMIC CORP. USE ONLY AS AUTHORIZED IN WRITING.

		DATE
ENGR	J E BROWN	
DWN	J E BROWN	8 9 82
CHKD	NJB/REC	12 7 82
SUPV	SAStierwalt	4-18-83
GAT		
DOE		

SANITARY AND FIRE WATER SYSTEM
PLAN
SHEET 4 OF 9
SCALE 1"=100'
X-230A-28C

SHEET X-230B 78-C



UNCLASSIFIED/NOT UCNI
Charles Crabtree ADC 4148
Review Date: 2-3-00

1426

INFORMATION ONLY

REV. No.	ISSUE PURPOSE	BY	A. E. B. DATE	OPERATOR & DATE	A. E. C. & DATE
0	AS BUILT AS REC'D FROM A-E WAS REV NONE DATED 12-12-53				

UNITED STATES
ATOMIC ENERGY COMMISSION

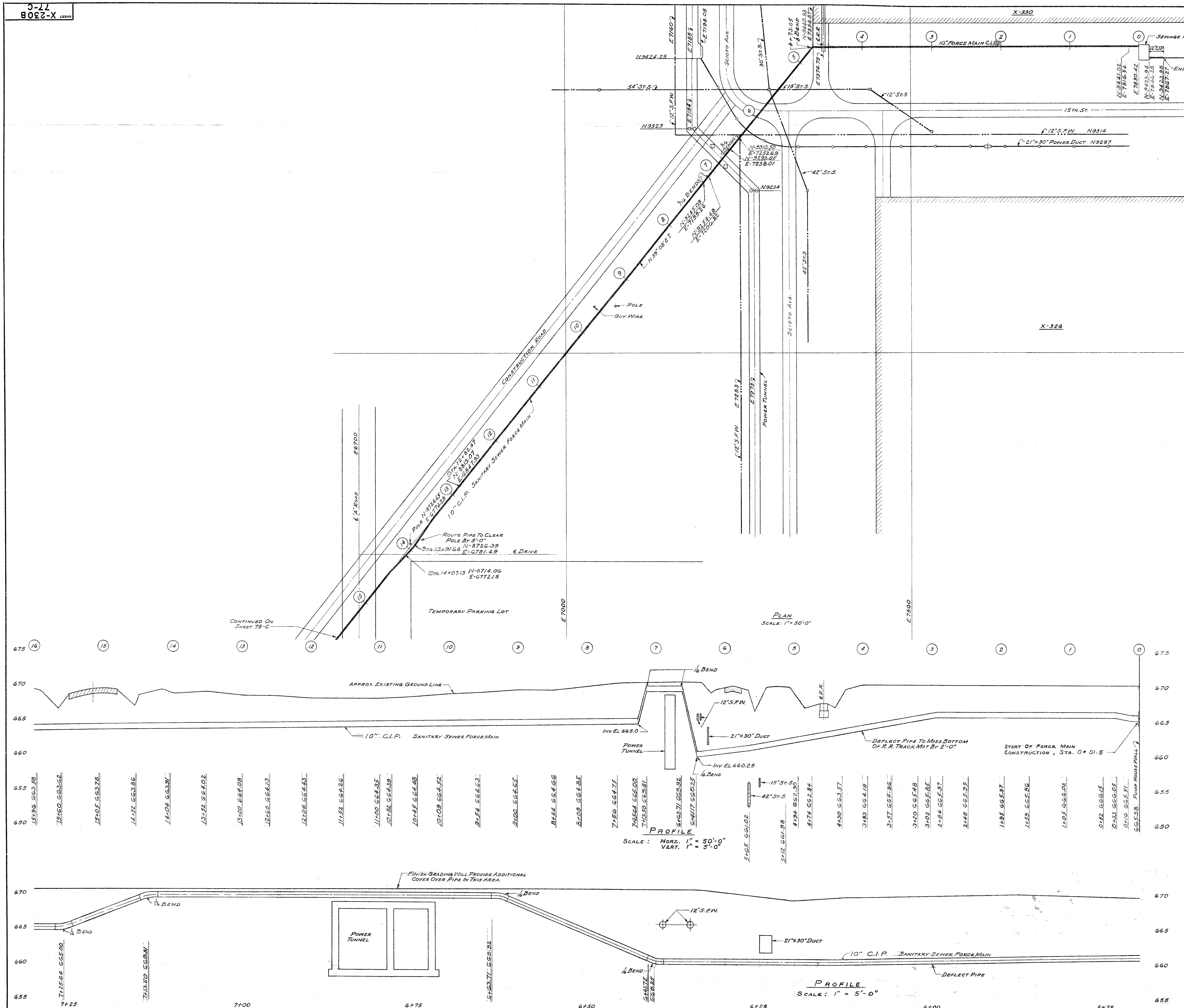
A. M. KINNEY, INC.
CONSULTING ENGINEERS CINCINNATI 19, OHIO
A. E. C. CONTRACT No. AT-(40-1)-1373

DRAWING TITLE
SEWAGE SYSTEM
FORCE MAIN SHEET 2 OF 2

DRAWING APPROVED DATE	DRAWING APPROVED DATE	DRAWING APPROVED DATE
11-6-53 ARCHITECT-ENGINEERS	M. BENDER 11-30-53 CARBIDE & CARBON CHEMICALS CO.	H.C. HOOPER 12-2-53 A. E. C. ENGINEER

DRAWN	DATE	CHECKED	DATE	
R. J. MERZ.	10-26-53	U. W. Seifert	10-28-53	130
IN CHARGE	11-6-53	CHIEF	11-6-53	

PROJECT	BUILDING	SHEET
X SITE PORTSMOUTH AREA	X-230B	78-C



UNCLASSIFIED/NOT UCNI
Charles Crabtree ADC 4148
Review Date: 2-3-00

REVIEWED FOR CLASSIFICATION
Classification: unclassified
Date: 7/1/77
By: S.A. Thomas

SEQUENCE NO. 1475

INFORMATION ONLY

REV. No.	ISSUE PURPOSE	BY	DATE
0	AS BUILT AS REC'D FROM A-E WAS REV. DATED 12-15-53		7/11/77

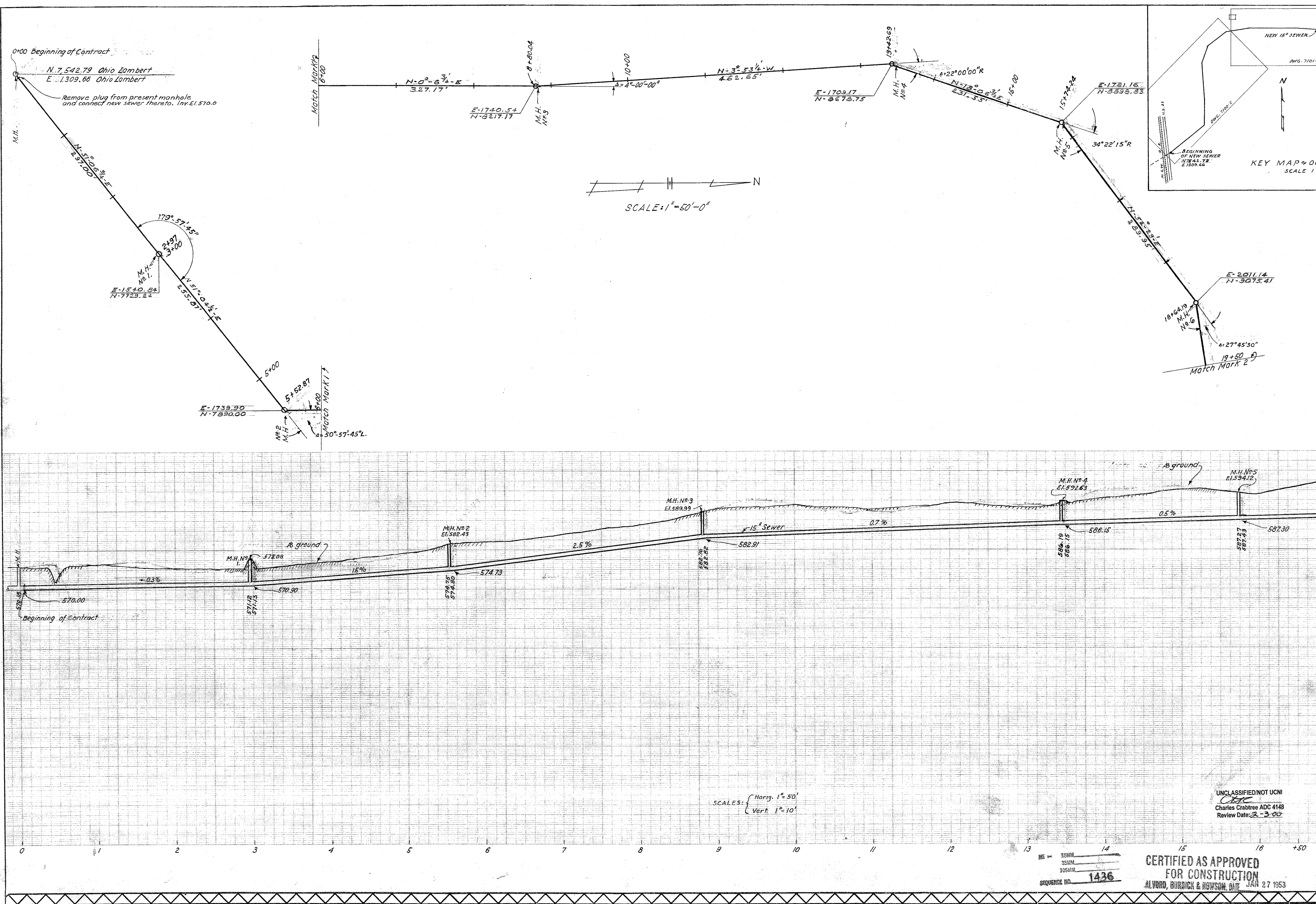
UNITED STATES
ATOMIC ENERGY COMMISSION

A. M. KINNEY, INC.
CONSULTING ENGINEERS CINCINNATI 19, OHIO
A. E. C. CONTRACT No. AT-(40-1)-1373

DRAWING TITLE
SEWAGE SYSTEM
FORCE MAIN SHEET 1 OF 2

DRAWING APPROVED DATE	DRAWING APPROVED DATE	DRAWING APPROVED DATE
ARCHITECT-ENGINEER 11-6-53	M. BENDER 11-30-53 CARBIDE & CARBON CHEMICALS CO.	H.C. HOOPER 12-2-53 A. E. C. ENGINEER

DRAWN: R.J. MERZ 10-26-53 — CHECKED: U.W. Seifert 10-28-53
PROJECT: X SITE PORTSMOUTH AREA — BUILDING: X-230B — SHEET: 77-C
130



REV. NO.	ISSUE PURPOSE	BY	A-E & DATE	OPERATOR & DATE	A.E.C. & DATE
1	ADDED COORDINATES AND BEARINGS		6/71		
0	AS BUILT AS RECD FROM AE. WAS ORIGINALLY REV. 3 DATED 9-2-56				

UNITED STATES ATOMIC ENERGY COMMISSION

ALVORD, BURDICK & HOWSON
20 NORTH WACKER DRIVE, CHICAGO 6, ILLINOIS
AT-(40-1)-1519

DRAWING TITLE

SEWAGE PLANT OUTFALL SEWER

DRAWING APPROVED — DATE	DRAWING APPROVED — DATE	DRAWING APPROVED — DATE
D.H. MAXWELL 1-16-53	R.A. WALKER 1-16-53	L.H. JACKSON 1-16-53
ARCHITECT ENGINEER	CARBIDE & CARBON CHEMICALS CO.	A.E.C. ENGINEER

DRAWN	DATE	CHECKED	DATE
A.W.H. F.S.	1-5-53	A.W.H.	1-6-53

PROJECT: X SITE PORTSMOUTH AREA
BUILDING: X-230 B
SHEET: 7100-C

UNCLASSIFIED/NOT UCNI
Charles Crabtree ADC 4148
Review Date: 2-3-00

SEQUENCE NO. 1436

CERTIFIED AS APPROVED FOR CONSTRUCTION
ALVORD, BURDICK & HOWSON, DATE JAN 27 1953

39336

INFORMATION ONLY

REV. NO.	ISSUE PURPOSE	BY
1	ADDED COORDINATES AND BEARINGS. AS BUILT AS PER D.C.R. ...	

UNITED STATES
ATOMIC ENERGY COMMISSION

ALVORD, BURDICK & HOWSON
20 NORTH WACKER DRIVE, CHICAGO 6, ILLINOIS
AT-(40-1)-1519

DRAWING TITLE
SEWAGE PLANT OUTFALL SEWER

DRAWING APPROVED — DATE	DRAWING APPROVED — DATE	DRAWING APPROVED — DATE
D.H. MAXWELL 1-16-53	R.A. WALKER 1-16-53	L.H. JACKSON 1-16-53
ARCHITECT ENGINEER	CARBIDE & CARBON CHEMICALS CO.	A.E.C. ENGINEER

DRAWN	DATE	CHECKED	DATE
A.W.H. F.S.	1-5-53	A.W.H.	1-6-53

PROJECT	BUILDING	SHEET
X SITE PORTSMOUTH AREA	X-230 B	7102-C

UNCLASSIFIED/NOT UCNI
Charles Crabtree ADC 4148
Review Date: 2-3-00

CERTIFIED AS APPROVED FOR CONSTRUCTION
ALVORD, BURDICK & HOWSON, DATE MAR 25 1953

SEQUENCE NO. 1438

39334

X-230C-1.9-C

E
N
S
W
0 100 200
GRAPHIC SCALE

TRUCK ACCESS RD.

MATCHLINE -2-

MATCHLINE -A-

MATCHLINE -B-

"C" ROAD

PERIMETER ROAD

LYNCH ST.

X-615
X-616
X-1065
X-744S (#7)
X-744U (#5)
X-744T (#6)
X-7745R STORAGE YARD
X-7725
X-7725A
X-7726
X-7727H
X-1107EP
X-1107EV
X-2207E PARKING
X-3002
X-3012
X-3001
X-6613
X-6643I
X-6644
X-6643II
X-5000
X-5001
X-6619
X-6614E

E6000
E5000
N9000
N8000
N7000
N6000

N7689.37
E6232.71
CB-AB-2

N7542.45
E5989.42
INV. 660.29
CB113

N7493.00
E5703.00
INV. 659.55
CB111

N7542.45
E5422.87
INV. 660.02
CB110

END OF CMP
N7898.39
E5606.65
INV.651.62

EXIST. 72" C.M.P.

N7945.00
E5510.00
INV.659.50
CB200A

N7770.00
E5484.50
INV.668.13

N7730.00
E5257.00
INV.662.70
CB201A

N7445.50
E5290.17
INV.664.67

N7483.74
E5198.41
INV.665.93

N7425.00
E5375.13
INV.665.03
CB147

N7395.00
E5265.00
INV.664.50
CB148

N7030.50
E5265.00
INV. 664.50

N7180.00
E5265.00
INV. 664.50
CB47

N7379.97
E5200.00
INV.661.50

N7473.33
E5180.54
INV.666.08

N7568.42
E5197.00
INV. 665.93

N7612.00
E5197.00
INV.665.75

N7710.00
E5187.00
INV.664.74
CB176

N7710.00
E5119.00
INV.666.71
CB180

N7710.00
E5063.00
INV.666.25
CB96

N8015.00
E5030.00
INV. 660.18
CB6

N8883.50
E4904.00
INV. 655.50

N8937.50
E4940.00
INV. 657.50

N8952.67
E4905.00
INV. 656.30

N8771.00
E4875.00
INV. 655.43
CB140

TO X-2230N HOLDING POND

TO X-2230N HOLDING POND

N7517.50
E4919.13
INV. 666.90

N7302.25
E4919.13
INV. 670.63

N7106.75
E4919.13
INV.672.59

N6627.50
E6285.00
INV.662.35
CB10

N6525.50
E6217.50
INV. 665.14
CB72

N6361.75
E6099.00
INV.661.42

N6627.50
E5985.00
INV.661.35
CB11

N6361.75
E6007.50
INV.665.52

N6525.50
E5888.00
INV. 664.64
CB71

N6627.50
E5685.00
INV.663.94
CB12

N6525.50
E5610.75
INV. 664.64
CB70

N6452.00
E5452.50
INV.664.64

N6542.00
E5444.02
INV.664.64

N6745.59
E5335.67
INV.659.51
CB113

N5713.75
E6215.00
INV.663.69

N5629.00
E6135.00
INV.658.34

N5691.50
E6321.75
INV.662.24

N5629.00
E6285.00
INV.658.34

N5872.79
E6095.00
INV.665.33

N5711.93
E6057.67
INV.664.45

N5826.08
E6064.67
INV.665.09

N5872.79
E6007.50
INV. 665.15

N5629.00
E5985.00
INV.658.34

N5713.75
E5885.50
INV.663.69

N5629.00
E5685.00
INV.658.34

N5629.00
E5685.00
INV.657.34

N5713.75
E5615.00
INV.663.69

N5629.00
E5535.00
INV.657.34

N6280.00
E5509.50
INV.665.72

N6077.71
E5452.50
INV.666.18

N6012.50
E5509.50
INV.666.28

N5831.50
E5509.50
INV.665.47

N5645.45
E5436.45
INV.661.39

N5985.00
E5440.00
INV.665.98

N5680.36
E5388.34
INV.658.24

N6169.50
E5388.34
INV.661.50

N5992.71
E5388.34
INV.659.90

N5779.00
E5265.00
INV.662.20

N6164.00
E5052.33
INV.670.00

N6088.80
E5122.33
INV.670.50

N5935.04
E5122.33
INV.670.00

N5698.14
E4984.00
INV.659.70

N6230.00
E5052.33
INV.670.05

N5754.00
E4937.50
INV.660.50

N6230.00
E4937.50
INV.670.50

N6164.00
E4937.50
INV.670.00

N5754.00
E4824.00
INV.660.90

N5745.00
E4790.00
INV.661.02

UNCLASSIFIED/NOT UCNI
Charles Crabtree ADC 4148
Review Date: 2-3-00

AUTOCAD

LOCATION KEY

LEGEND
- MANHOLE
- CATCH BASIN
- DIRECTION OF FLOW
- LINE CAPPED OFF
- FLOW DIRECTION OF ROOF
- HIGH POINT OF ROOF
- VALLEY LINE
- MATCHLINE

REV	DWN	ENG	DEPT MGR	DESCRIPTION	USEC	LMUS	DATE
0	DRT	LKA	JMH	APPROVED FOR RELEASE		JMH	12/20/95

REVISION OR ISSUE PURPOSE — APPROVED-INITIALS AND DATE

APPROVALS	DATE
DONALD R TOMILSOM DRAWN	12/20/95
RANDY R McROBERTS CHECKED	12/20/95
LARRY K ARTHUR ENG	12/20/95
JOHN M HORTEL DEPT MGR	12/20/95
LMUS	
USEC	

UNITED STATES ENRICHMENT CORPORATION

LOCKHEED MARTIN — LOCKHEED MARTIN UTILITY SERVICES, INC.
P.O. BOX 628 PIKETON, OHIO 45661
ACTING UNDER CONTRACT USEC-HQ-93-C-0005 WITH THE U.S. ENRICHMENT CORPORATION

PROJECT ESO# 6048-95 — SHEET OF 9 OF 10
SUBPROJECT

TITLE: PLANT STORM DRAIN SYSTEM MATCHLINE -A-, MATCHLINE -B-, MATCHLINE -2-

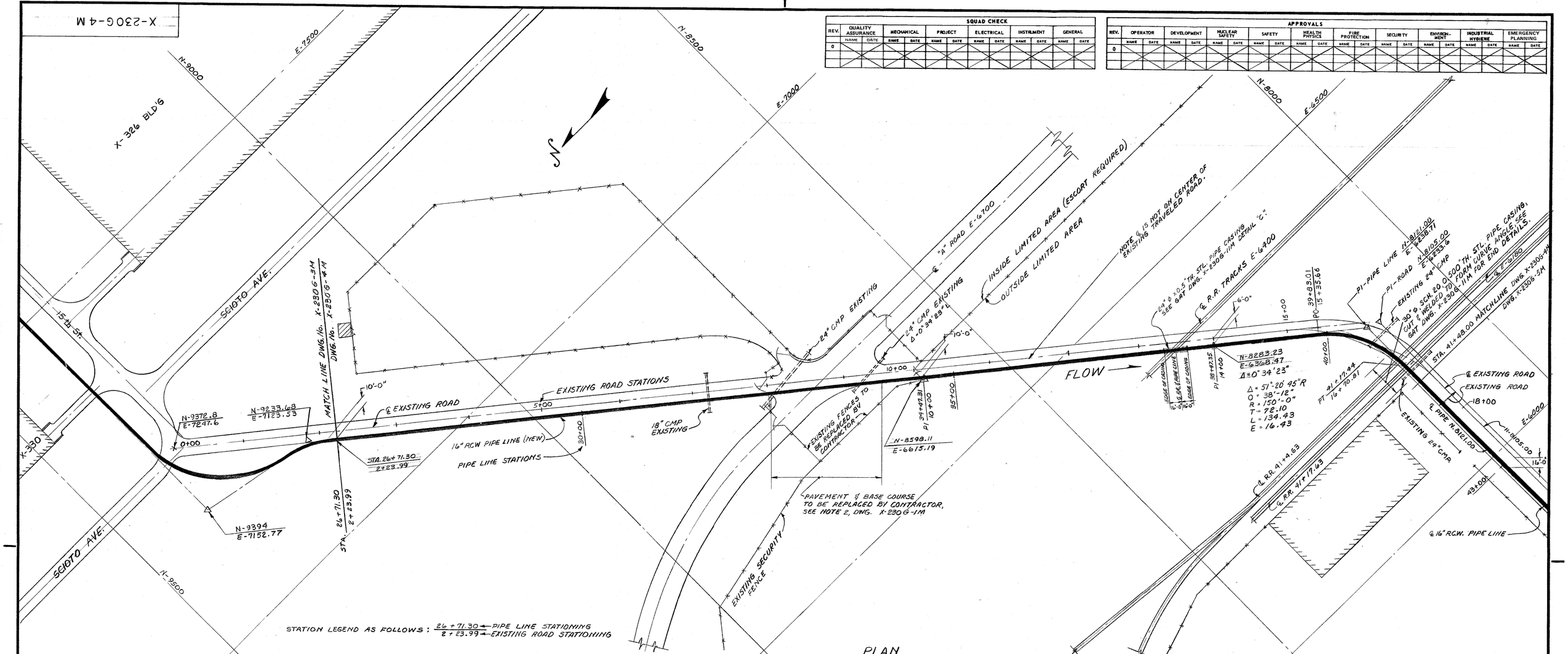
SCALE 1"=100' — DWG NO X-230C-1.9-C — REV 0

3837

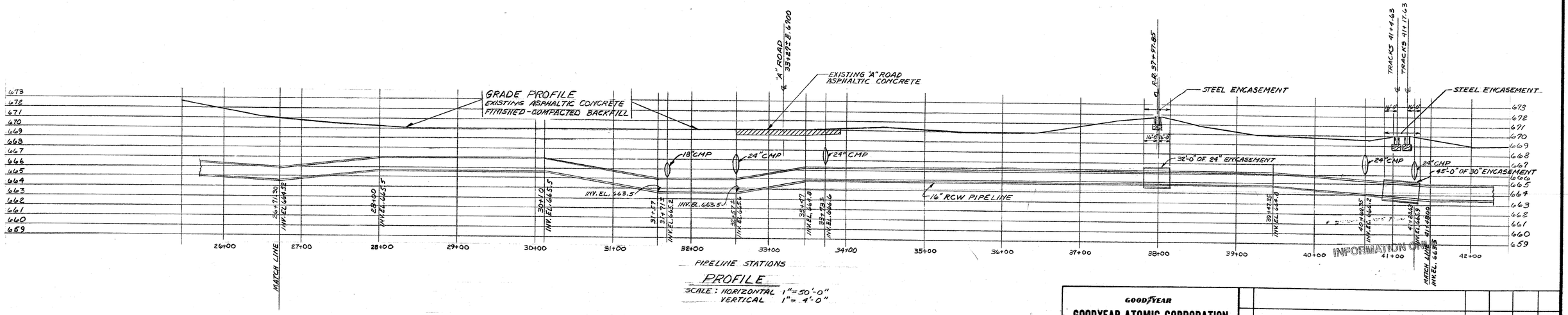
X-2306-4M

SQUAD CHECK												
REV.	QUALITY ASSURANCE		MECHANICAL		PROJECT		ELECTRICAL		INSTRUMENT		GENERAL	
	NAME	DATE	NAME	DATE	NAME	DATE	NAME	DATE	NAME	DATE	NAME	DATE
0												

APPROVALS																			
REV.	OPERATOR		DEVELOPMENT		NUCLEAR SAFETY		SAFETY		HEALTH PHYSICS		FIRE PROTECTION		SECURITY		ENVIRON-MENT		INDUSTRIAL HYGIENE		EMERGENCY PLANNING	
	NAME	DATE	NAME	DATE	NAME	DATE	NAME	DATE	NAME	DATE	NAME	DATE	NAME	DATE	NAME	DATE	NAME	DATE	NAME	DATE
0																				



PLAN
SCALE : 1"=50'-0"



PROFILE
SCALE : HORIZONTAL 1"=50'-0"
VERTICAL 1"= 4'-0"

INFORMATION ONLY

UNCLASSIFIED/NOT UCNI
Anthony Saraceno ADC 4052
Review Date: 2-3-00

GOODYEAR
GOODYEAR ATOMIC CORPORATION
P. O. BOX 628
PIKETON, OHIO 45661
ACTING UNDER CONTRACT EY-76-C-05-0001 WITH THE U.S. DEPARTMENT OF ENERGY

REV	DESCRIPTION	ERDA	DATE	APPD	DATE
0	REDRAWN WAS ORIGINALLY DWG. NO. DX-23170-M4-REV.0			JCH	3/5/79

REFERENCE:

ENGR H.E.M.	DATE 10-21-56	R.C.W. WASTE LINE STA. 26+71.30 TO STA. 41+48.00
DWN S.M. ANDERSON	11-21-78	
CHKD N.W. DOFFY	" 22 78	
SUPV J. Chestler	3-5-79	
GAT		SCALE AS NOTED
ERDA		FAC X-SITE

X-2306-4M

SUBJECT MATTER PROPERTY OF GOODYEAR ATOMIC CORP. USE ONLY AS AUTHORIZED IN WRITING.

0 1" 2"

39750

X-230G-5M

REV.	SQUAD CHECK		MECHANICAL		PROJECT		ELECTRICAL		INSTRUMENT		GENERAL	
	NAME	DATE	NAME	DATE	NAME	DATE	NAME	DATE	NAME	DATE	NAME	DATE
0												

REV.	OPERATOR		DEVELOPMENT		NUCLEAR SAFETY		SAFETY		HEALTH PHYSICS		FIRE PROTECTION		SECURITY		ENVIRON-MENT		INDUSTRIAL HYGIENE		ENGINEERING G.A.	
	NAME	DATE	NAME	DATE	NAME	DATE	NAME	DATE	NAME	DATE	NAME	DATE	NAME	DATE	NAME	DATE	NAME	DATE	NAME	DATE
0																				

LEGEND

STATION LEGEND AS FOLLOWS : PIPE LINE STATIONING — 46+66.63
EXIST. ℄ ROAD STATIONING — 21+97.26

INFORMATION ONLY
UNCLASSIFIED/NOT UCNI
Anthony Saraceno ADC 4052
Review Date: 2-3-00

GOODYEAR

GOODYEAR ATOMIC CORPORATION
P. O. BOX 628
PIKETON, OHIO 45661
ACTING UNDER CONTRACT EY-76-C-05-0001 WITH THE U. S. DEPARTMENT OF ENERGY

REFERENCE: X-230G-1M, X-230G-12M, X-330-2027.50M, X-338-2023.50M

REV	DESCRIPTION	DOE	DATE	APPD	DATE
0	REDRAWN - WAS ORIGINALLY DWG. DX-23170-M5 REV. 0 10-22-56				

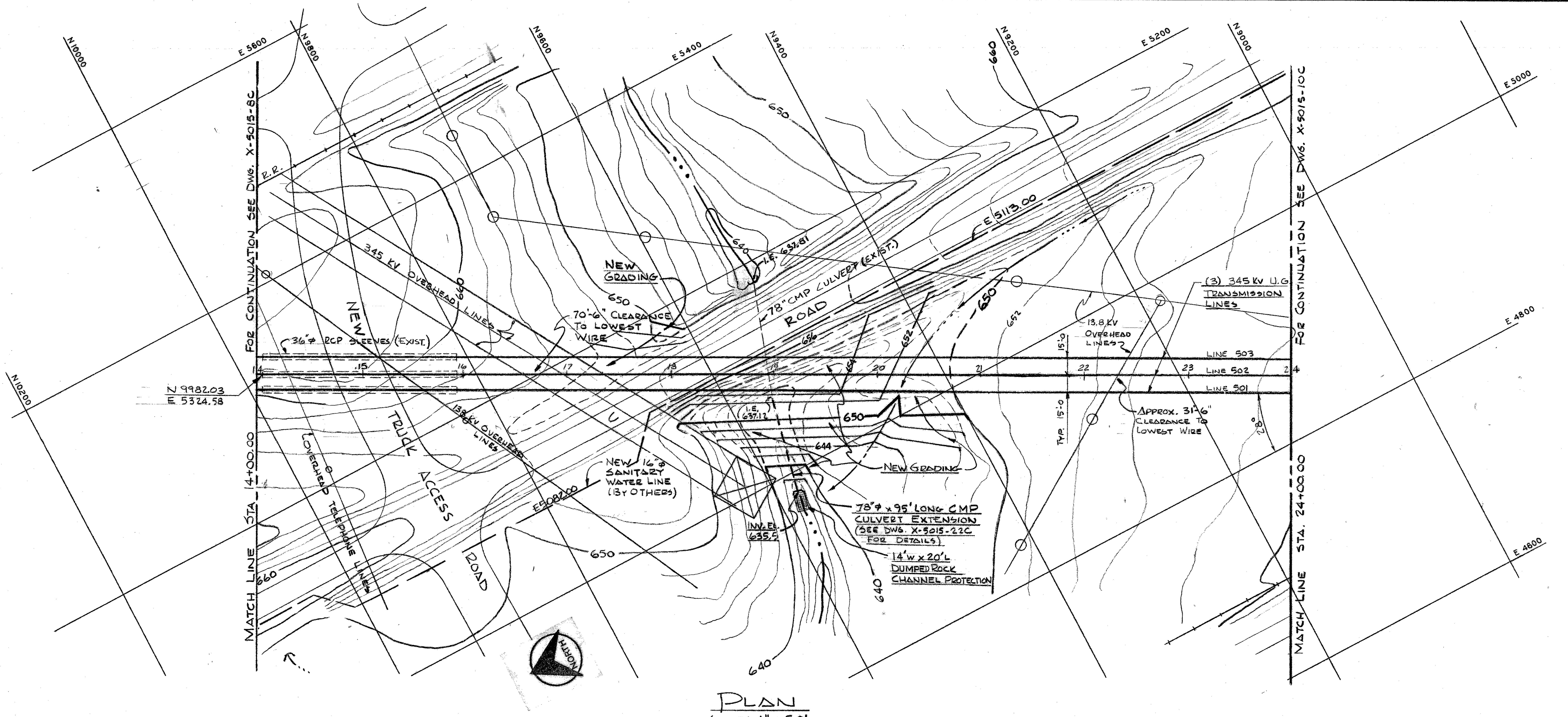
		DATE
ENGR	T. E. N.	
DWN	G. RANSOM	1-11-79
CHKD	N. DUFFY	1-25-79
SUPV		3-5-79
GAT		

R.C.W. WASTE LINE
STA. 41+48.00 TO STA. 57+81.71

SCALE AS NOTED
FAC X-SITE
X-230G-5M

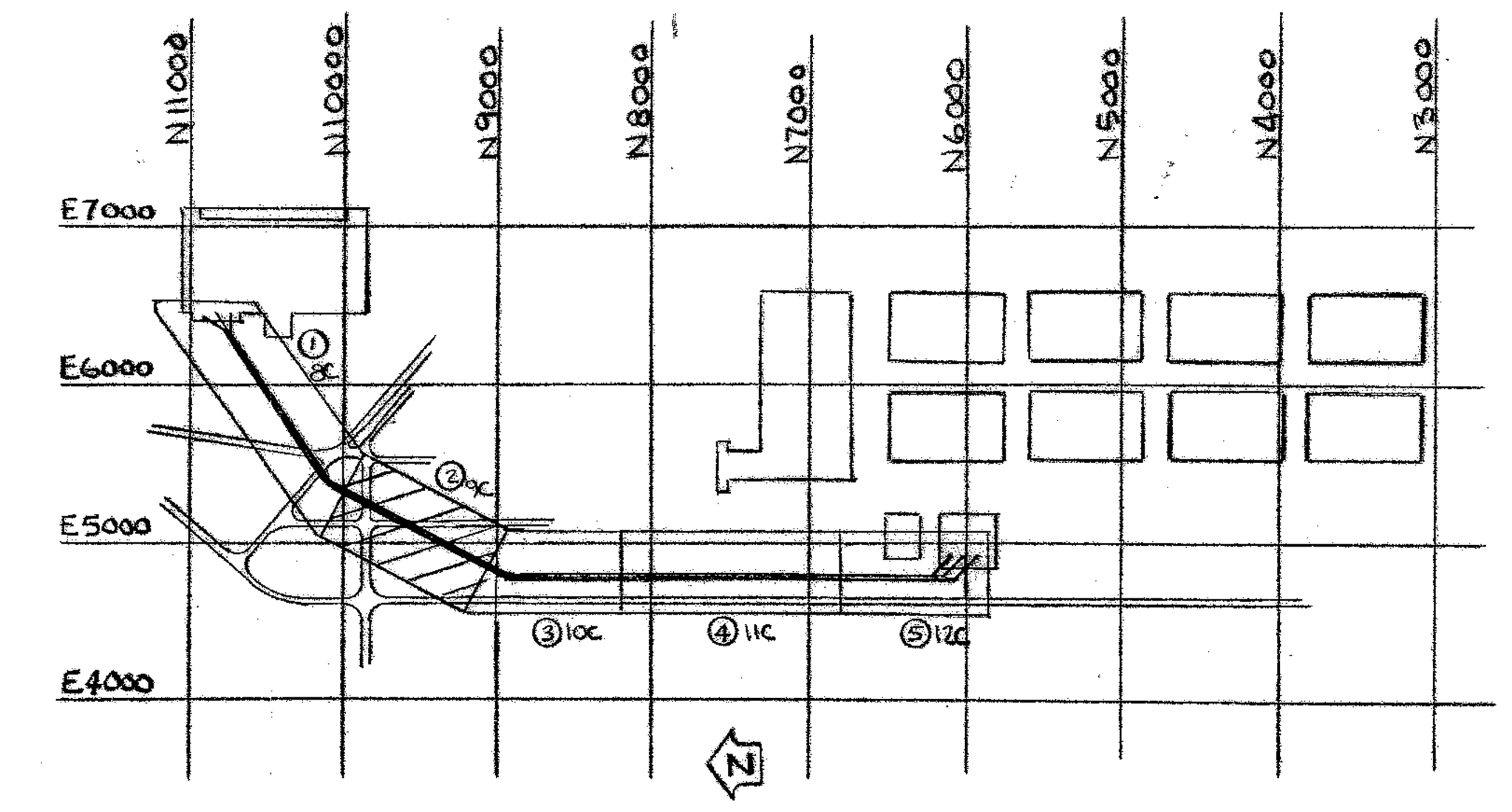
SUBJECT MATTER PROPERTY OF GOODYEAR ATOMIC CORP. USE ONLY AS AUTHORIZED IN WRITING.

39749

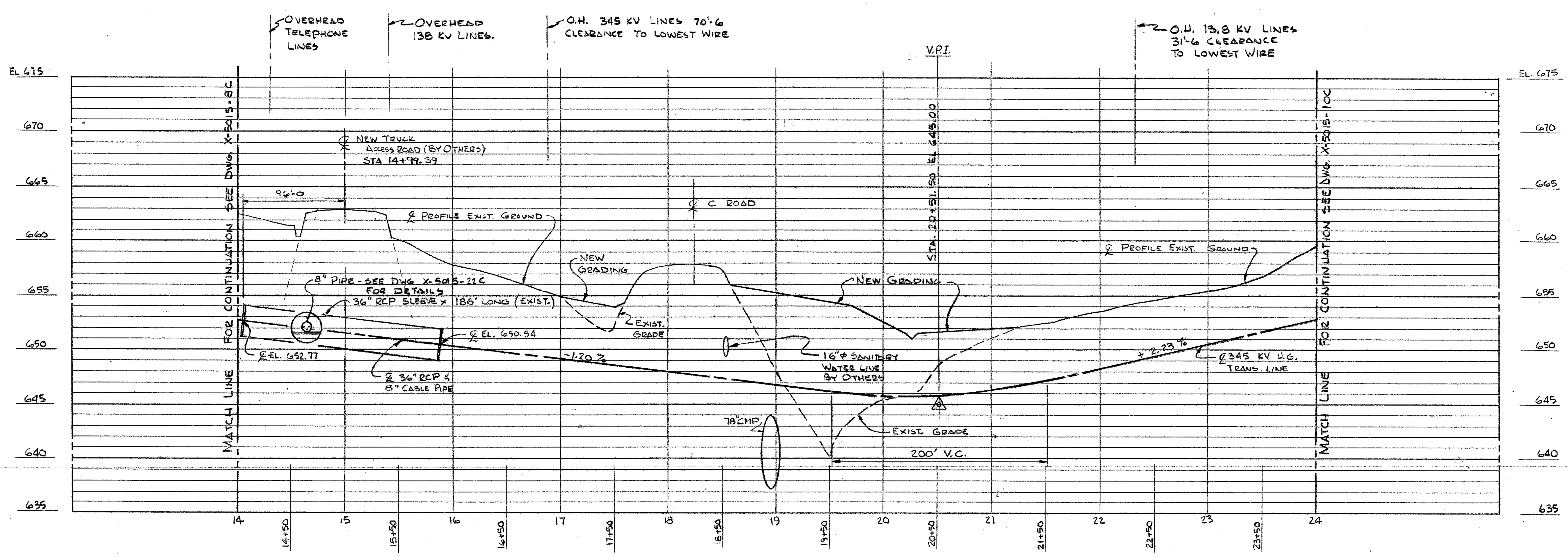


PLAN
SCALE: 1" = 50'

0 50 100 200 FEET



KEY PLAN



PROFILE ALONG U.G. LINE 502
SCALE: 1" = 50' HORIZ.
1" = 5' VERT.

NOTES:
SEE DWG X-5015-8C

INFORMATION ONLY

(14)

REV	DESCRIPTION	CAI		OCPO	EPEO
0	CERTIFIED FOR CONSTRUCTION	JJO 11/28/79		MC 11/29/79	11/29/79
	REVISION OR ISSUE PURPOSE	APPROVED INITIALS & DATE			

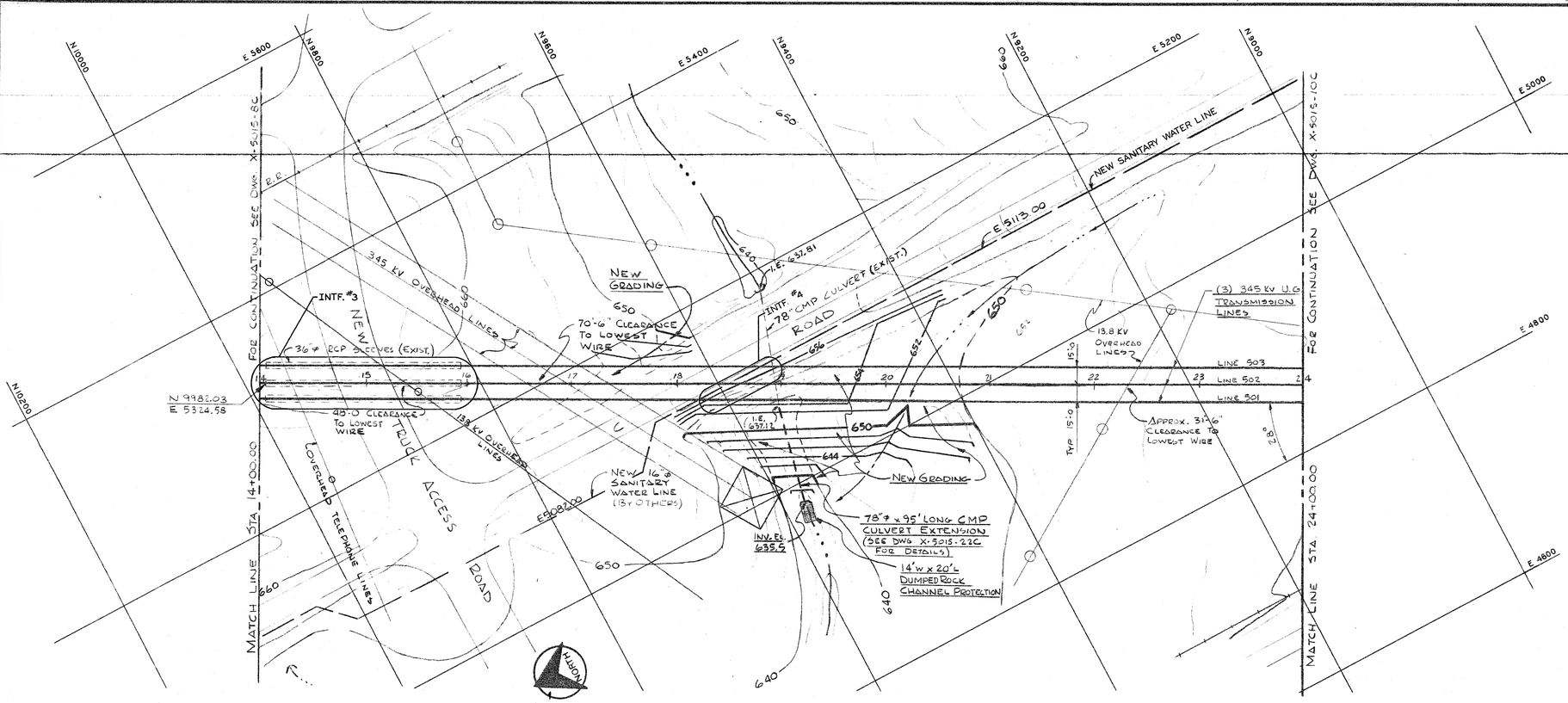
APPROVALS	DATE
D. J. VonHorn — DRAWN	1/10/79
D.D MOORE — CHECKED	11/26/79
D.D Moore PE — ENGINEER	11/28/79
M. A. Ritsema P.E. — P.E.	11-28-79
[illegible] P.E.	11/28/79
M.I. LUNDIN — OCPO	11/29/79
H.L. McCRACKEN — EPEO ENGRG	11/29/79

UNITED STATES
DEPARTMENT OF ENERGY

Gilbert/Commonwealth engineers/consultants/architects
COMMONWEALTH ASSOCIATES INC., 209 E. Washington Avenue, Jackson, MI 49201 Tel. 517 788-3000
DE-AC05-78OR05780

PROJECT GAS CENTRIFUGE ENRICHMENT PLANT
SUBPROJECT 345KV U.G. TRANSMISSION SYSTEM
TITLE PLAN & PROFILE - PART 2

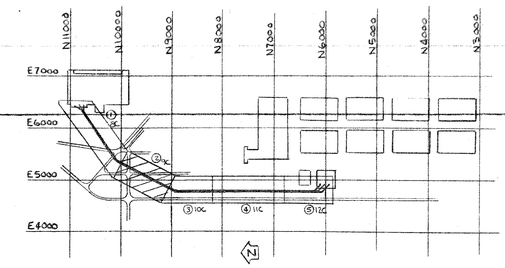
TYPE	PLANT	BLDG	FLOOR	SHT	OF	CLASS	SCALE	ID	DWG NO	REV
P	X	X-5015				U	AS NOTED	CP4-03	X-5015-9C	0

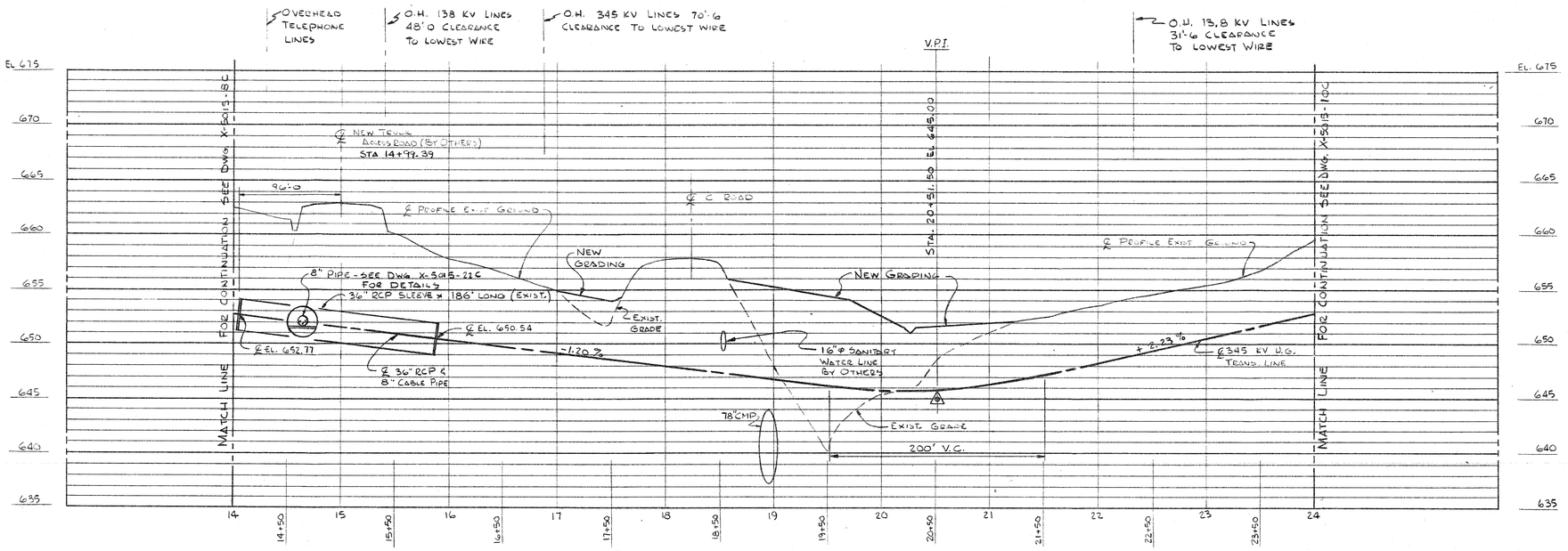


PLAN

SCALE: 1" = 50'

0 50 100 200 FEET





PROFILE ALONG U.G. LINE 502

SCALE: 1" = 50' HORIZ.
1" = 5' VERT.

NOTES:

SEE DWG X-5015-8C

INFORMATION ONLY

INTERFACE DESIGNATION TABLE

INTF. NO.	① SID	COORDINATES	℄ ELEV.	DESCRIPTION
3	02-A	E5280 N9897	651.6	TRUCK ACCESS ROAD CROSSING-THROUGH EXISTING CONCRETE CULVERT SLEEVES
4	02 A	E5113 N9584	646.8	SANITARY WATER LINE

① SYSTEM INTERFACE DRAWING

* (TYPE II) GCEP INTERFACE CONTROL DRAWING

REV	DESCRIPTION	CAI	CAT	SSC	EPEO	ICWG
	– WAS DWG. CID-X5015-9C REV. 0					
0	INITIAL ISSUE	RJH 11/79				

REVISION OR ISSUE PURPOSE — APPROVED INITIALS & DATE

SIGNATURES	DA	MO	YR
PREPARED W. B. GREEN	4	12	79
CHECKED	7	12	79
COORDINATION			
CATALYTIC			
SSC			
EPEO			
ICWG CHAIRMAN APPROVAL			

UNITED STATES DEPARTMENT OF ENERGY

Gilbert/Commonwealth engineers/consultants, architects

COMMONWEALTH ASSOCIATES INC. 209 E Washington Avenue, Jackson, MI 49201 Tel. 517 788-3000

DE-AC05-76OR05780

PROJECT GAS CENTRIFUGE ENRICHMENT PLANT

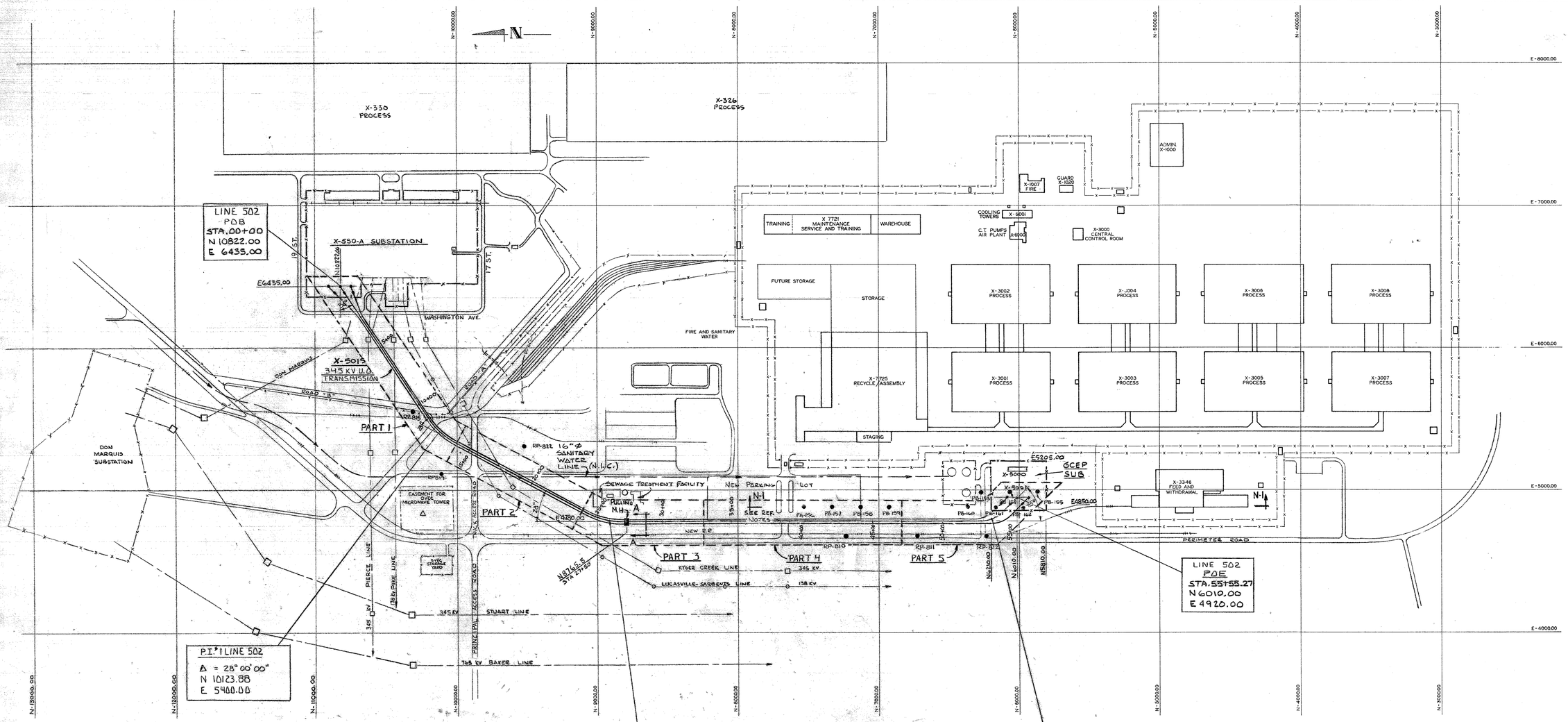
SUBPROJECT 345KV U.G. TRANSMISSION SYSTEM (WBS-413)

TITLE *PLAN & PROFILE - PART 2

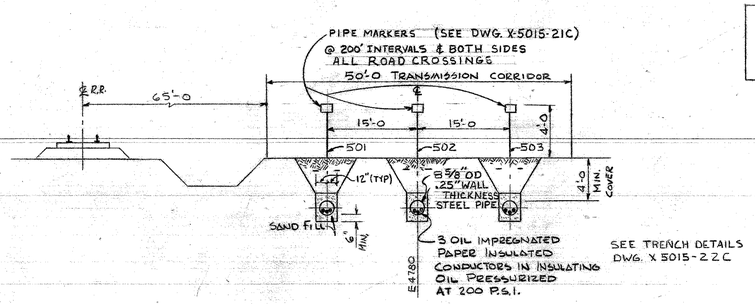
TYPE P

PLANT X | BLDG X-5015 | FLOOR | SHT | OF | CLASS U

SCALE AS NOTED | ID CP4-03-[redacted]-X-5015-9.1C | DWG NO | REV 0



PLAN



SECTION A-A
TYPICAL SECTION 345 KV PIPE TYPE CABLE SYSTEM
SCALE: 1"=10'-0 HORIZ.
1"=5'-0 VERT.

REFERENCES:

GEOTECHNICAL INVESTIGATION (LAW ENG.)

BORING PLAN (PB-157, RP-810, ETC.)	FIGURE 2-1
CROSS SECTIONS (N-1)	FIGURE 7-2; 7-7
CONTOURS TOP OF ROCK	FIGURE 7-11
GROUND WATER LEVEL CONTOURS	FIGURE 7-29

PLAN AND PROFILE DRAWINGS:

X-5015-8C	PART 1
X-5015-9C	PART 2
X-5015-10C	PART 3
X-5015-11C	PART 4
X-5015-12C	PART 5

DRAWINGS:

GCEP PLOT PLAN	E-C-21013 REV. C (CATALYTIC)
GENERAL PLAN	X-200 10.51-C (GOODYEAR)
TOPOGRAPHIC MAPS	DX-761-6010 (METROPOLITON MAPPING)
X-530 SWYD EXT.-LOWER PLAN	X-530A-3E (C.A.I.)
GCEP SUB. PROPERTY PLAN	X-5001-1E (C.A.I.)

INFORMATION ONLY

6

REV	DESCRIPTION	APPROVED INITIALS & DATE
0	CERTIFIED FOR CONSTRUCTION	CAI / OCPO / EPEO

APPROVALS	DATE
D.G. Van Horn DRAWN	7-28-78
M.S. Rittenour CHECKED	7-31-78
J.A. Nelson Jr. Rittenour ENGINEER	7-31-78
J. J. OWENS P.E.	8-1-78
M.I. LUNDIN OCPO	
H.H. McCracken EPEO ENGRG	

UNITED STATES DEPARTMENT OF ENERGY

Gilbert/Commonwealth engineers/consultants/architects

COMMONWEALTH ASSOCIATES INC., 209 E. Washington Avenue, Jackson, MI 49201 Tel. 517 788-3000

DE-AC05-78OR05780

PROJECT GAS CENTRIFUGE ENRICHMENT PLANT

SUBPROJECT 345KV U.G. TRANSMISSION SYSTEM

TITLE LOCATION PLAN

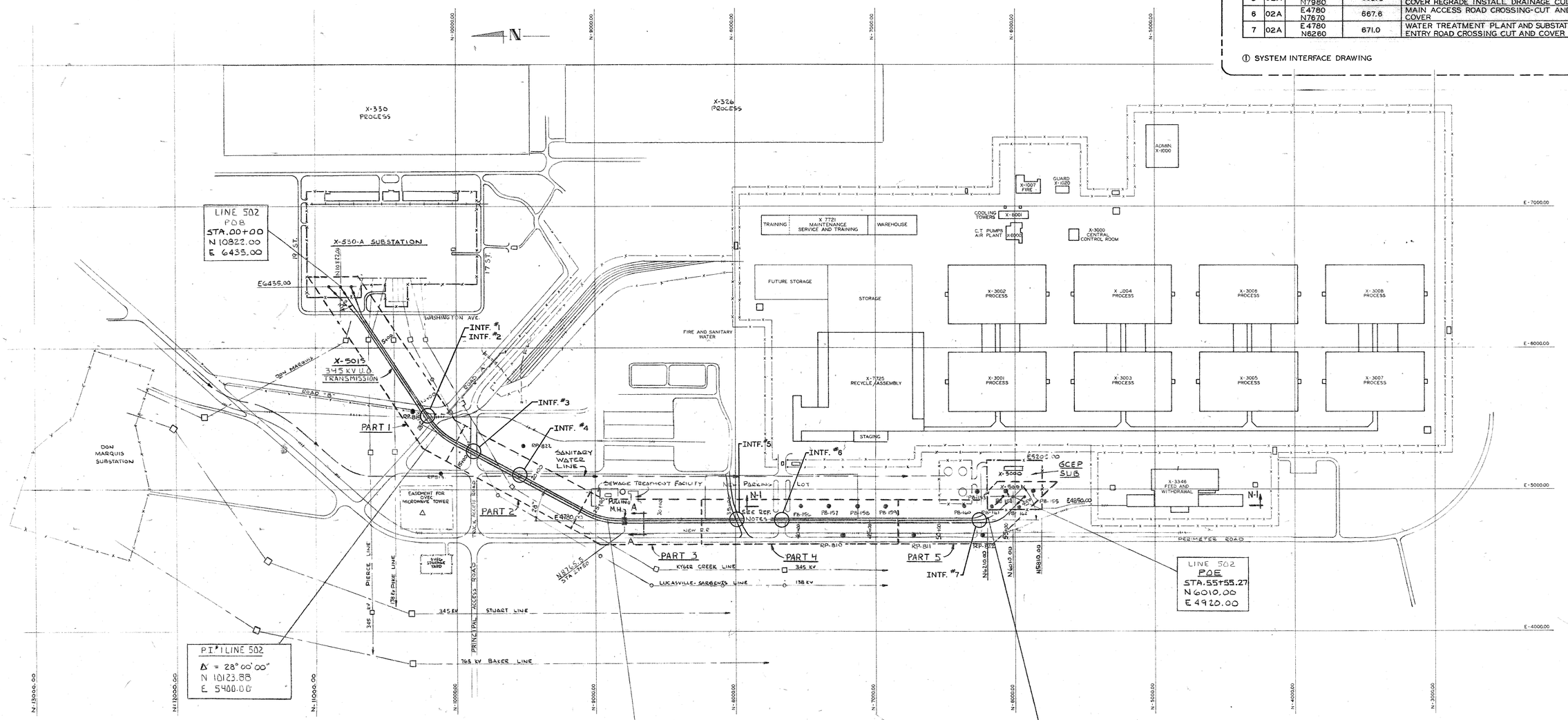
TYPE P

PLANT	BLDG	FLOOR	SHT	OF	CLASS
X	X-5015				U

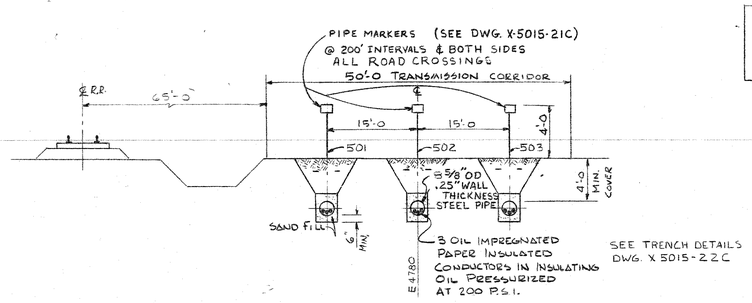
SCALE	ID	DWG NO	REV
1"=300'	CP4-03	X-5015-1C	0

INTERFACE DESIGNATION TABLE				
INTF. NO.	① SID	COORDINATES	℄ ELEV. PIPE CABLE	DESCRIPTION
1	02A	E5514 N10200	655.1	SECURITY FENCE CROSSING
2	02A	E5488 N10180	654.9	UPGRADED RAILROAD CROSSING - CUT AND COVER
3	02A	E5280 N9897	651.6	TRUCK ACCESS ROAD CROSSING - THROUGH EXISTING CONCRETE CULVERT SLEEVES
4	02A	E5113 N9584	646.8	SANITARY WATER LINE
5	02A	E4780 N7980	665.5	CONSTRUCTION ROAD CROSSING-CUT AND COVER REGRADE INSTALL DRAINAGE CULV.
6	02A	E4780 N7670	667.6	MAIN ACCESS ROAD CROSSING-CUT AND COVER
7	02A	E4780 N6260	671.0	WATER TREATMENT PLANT AND SUBSTATION ENTRY ROAD CROSSING CUT AND COVER

① SYSTEM INTERFACE DRAWING



PLAN
0 100 200 400 600 800 1000 FEET



SECTION A-A
TYPICAL SECTION 345 kV PIPE TYPE CABLE SYSTEM
SCALE: 1" = 10'-0 HORIZ.
1" = 5'-0 VERT.

REFERENCES:

GEOTECHNICAL INVESTIGATION (LAW ENG.)

BORING PLAN (PB-151, RP-810, ETC.)	FIGURE 2-1
CROSS SECTIONS (N-1)	FIGURE 7-2 : 7-7
CONTOURS TOP OF ROCK	FIGURE 7-11
GROUND WATER LEVEL CONTOURS	FIGURE 7-29

PLAN AND PROFILE DRAWINGS:

X-5015-8C	PART 1
X-5015-9C	PART 2
X-5015-10C	PART 3
X-5015-11C	PART 4
X-5015-12C	PART 5

DRAWINGS:

GCEP PLOT PLAN	E-C-21013 REV. C (CATALYTIC)
GENERAL PLAN	X-200 10.51-C (GOODYEAR)
TOPOGRAPHIC MAPS	DX-761-6010 (METROPOLITON MAPPING)
X-530 SWYD EXT.-LOWER PLAN	X-530A-3E (C.A.I.)
GCEP SUB. PROPERTY PLAN	X-5001-1E (C.A.I.)

INFORMATION ONLY

*(TYPE II) GCEP INTERFACE CONTROL DRAWING

REV	DESCRIPTION REVISION OR ISSUE PURPOSE	CAI	CAT	SSC	EPEO	ICWG	APPROVED INITIALS & DATE
-	WAS DWG. CID-X5015-1.1C REV. 0						
0	INITIAL ISSUE	6/14/79					

SIGNATURES	DA	MO	YR
PREPARED W.B. GREEN	4	12	79
CHECKED	7	12	79
COORDINATION			
CATALYTIC			
SSC			
EPEO			
ICWG CHAIRMAN APPROVAL			

UNITED STATES DEPARTMENT OF ENERGY

Gilbert/Commonwealth engineers / consultants / architects

COMMONWEALTH ASSOCIATES INC. 209 E. Washington Avenue, Jackson, MI 49201 Tel. 517 788-3000

DE-AC05-75OR29750

PROJECT GAS CENTRIFUGE ENRICHMENT PLANT

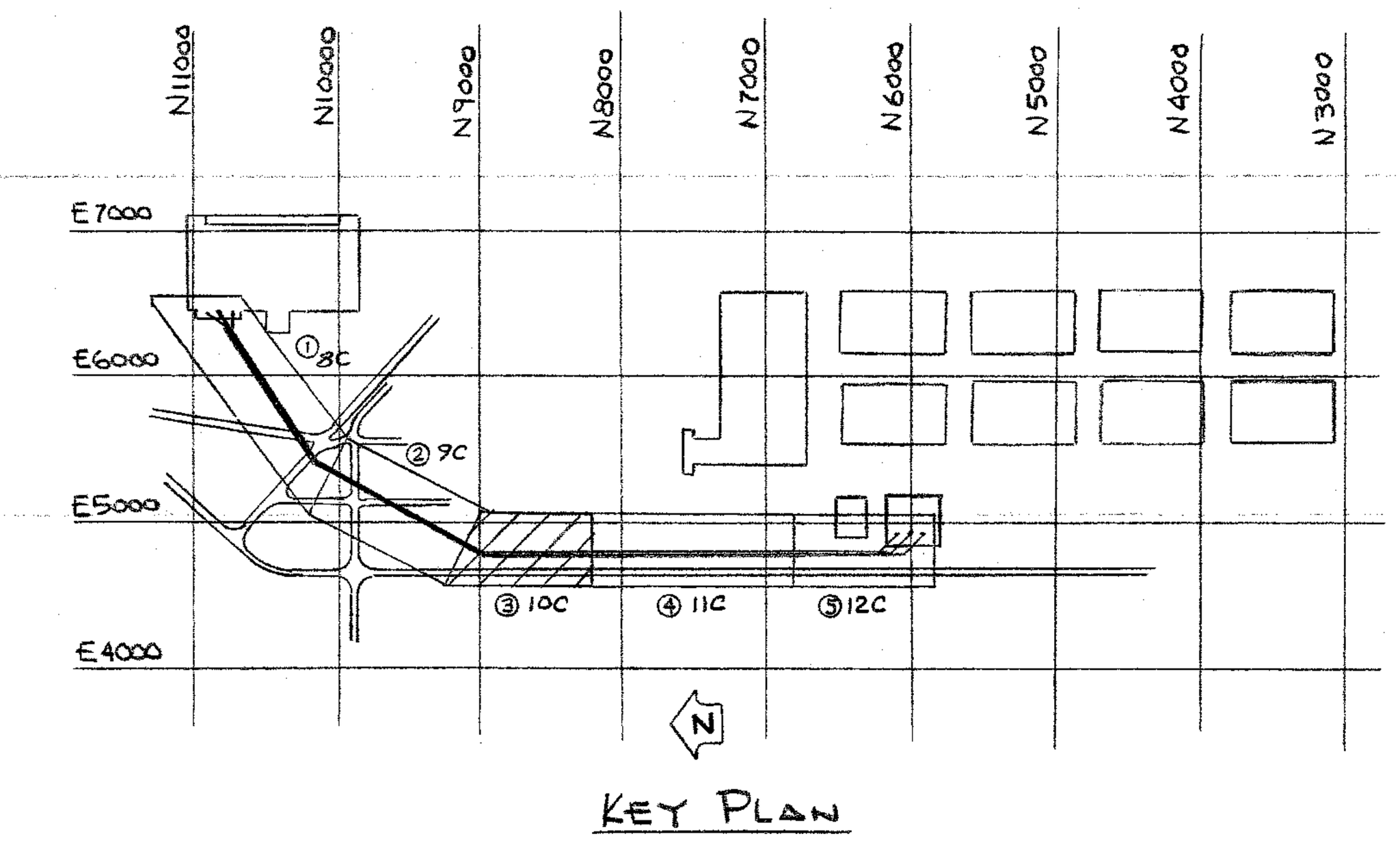
SUBPROJECT 345KV U.G. TRANSMISSION SYSTEM

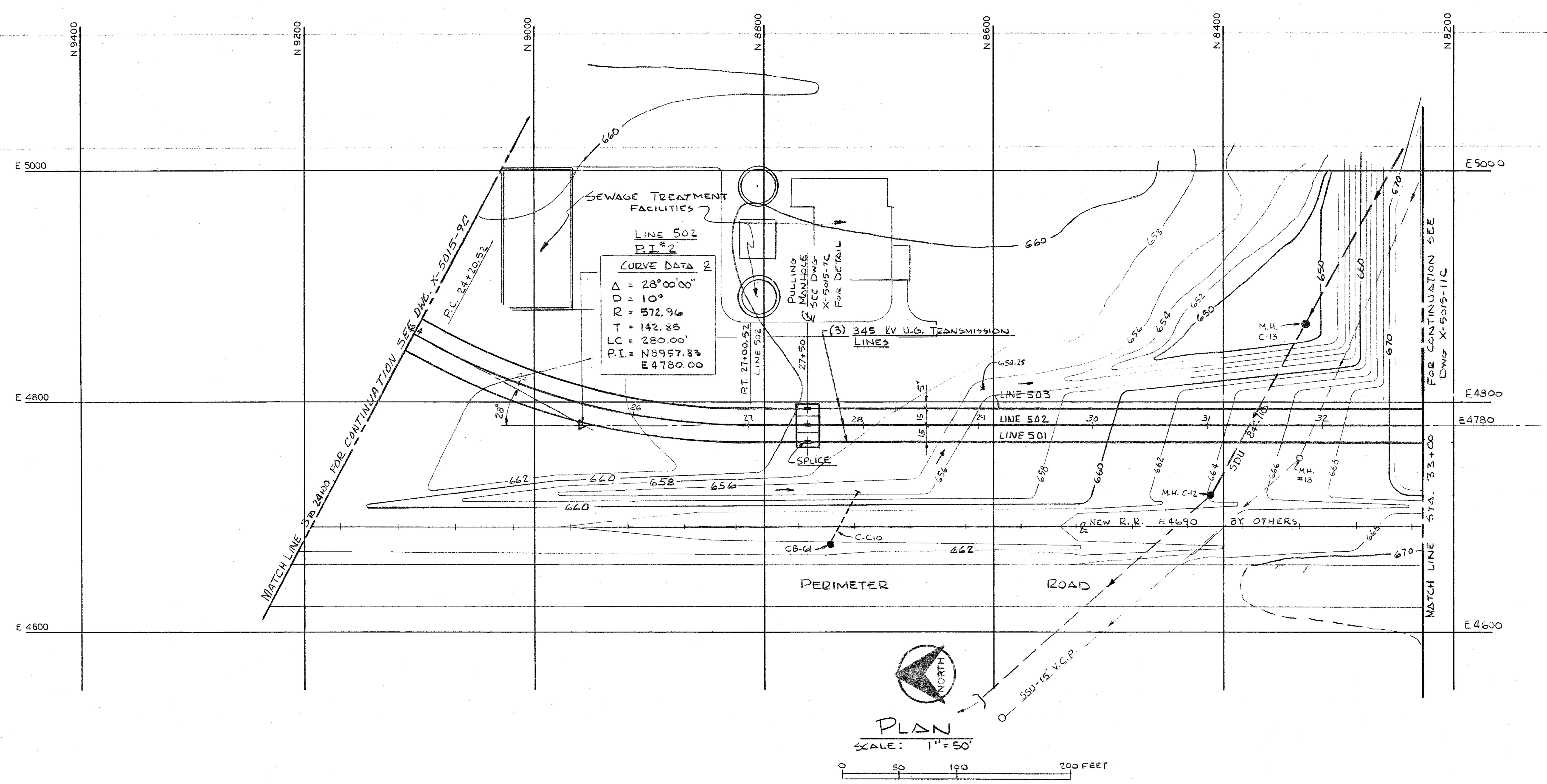
TITLE * LOCATION PLAN (WBS-413)

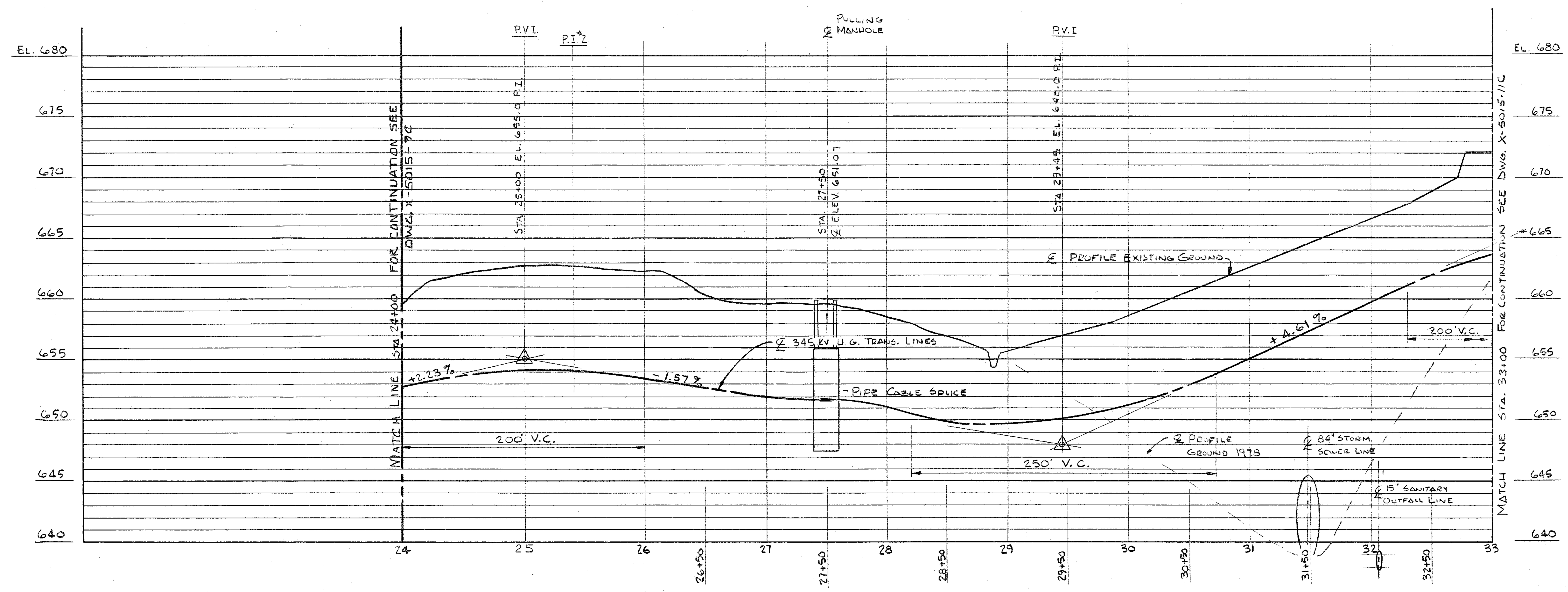
PLANT	BLDG	FLOOR	SHT	OF
X	X-5015			

TYPE P | CLASS U | REV 0

SCALE 1" = 300' | ID CP4-03 | DWG NO X-5015-1.1C







PROFILE ALONG U.G. LINE 502 (E4780)

SCALE: 1" = 50' HORIZ.
1" = 5' VERT.

NOTES:

SEE DWG. X-5015-8C

INFORMATION ONLY

(15)

REV	DESCRIPTION	CAI		OCPO	EPEO
1	AS-BUILT	M.J.R. 12-30-81			
0	CERTIFIED FOR CONSTRUCTION	11/28/79	11-28-79	11/29/79	11/29/79
REVISION OR ISSUE PURPOSE		APPROVED INITIALS & DATE			

APPROVALS	DATE
D.G. Van Horn — DRAWN	1/11/79
D.D. Moore — CHECKED	11/26/79
D.D. Moore PE — ENGINEER	11/28/79
M.J. Ritenour P.E. — P.E.	11-28-79
R.W. Hogan — QPM	11/28/79
M.I. Lunden — OCPO	11/29/79
H.L. McCracken — EPEO ENGRG	11/29/79

UNITED STATES
DEPARTMENT OF ENERGY

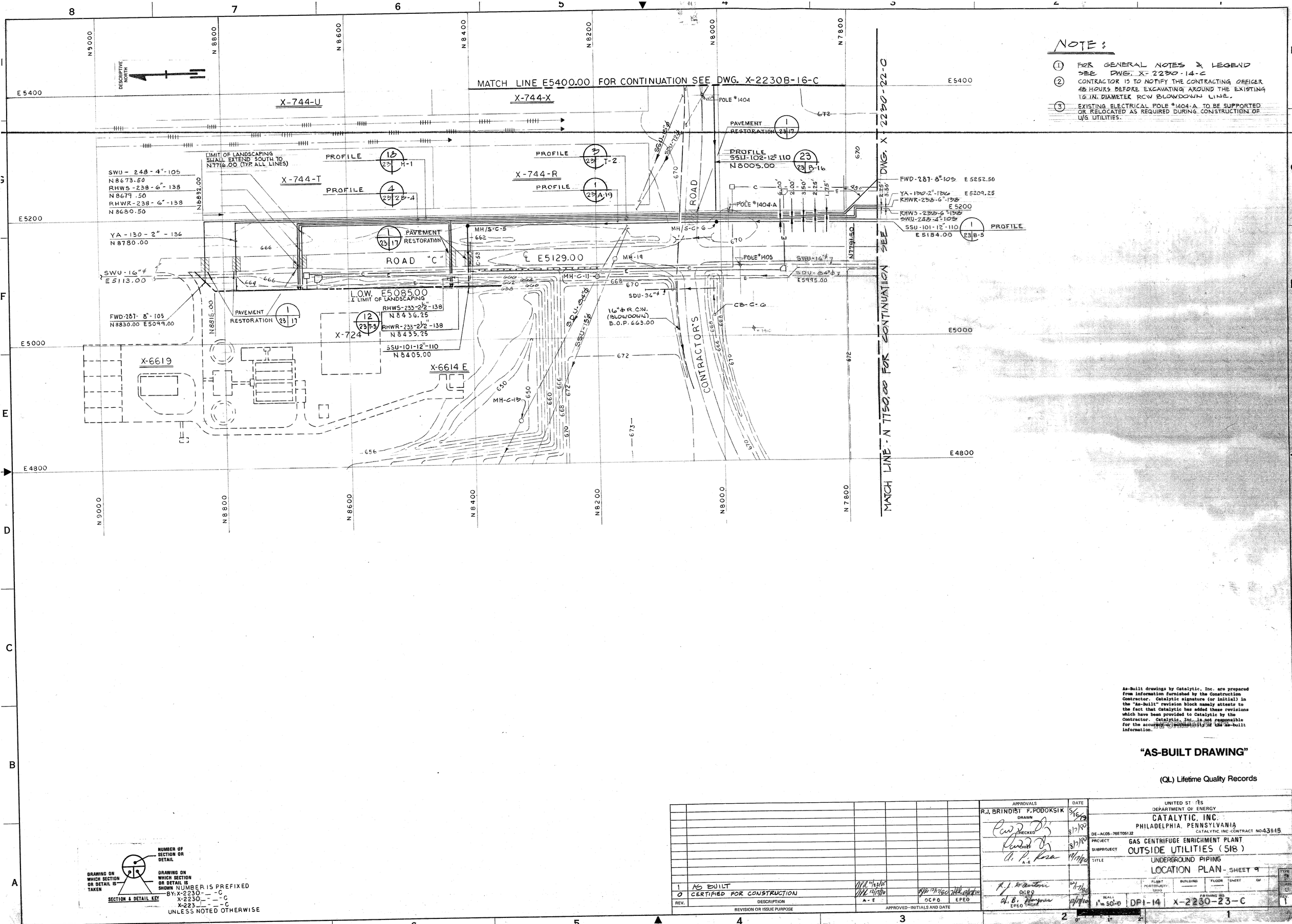
Gilbert/Commonwealth engineers/consultants/architects

COMMONWEALTH ASSOCIATES INC., 209 E. Washington Avenue, Jackson, MI 49201 Tel. 517 788-3000
DE-AC05-78OR05780

PROJECT GAS CENTRIFUGE ENRICHMENT PLANT
SUBPROJECT 345KV U.G. TRANSMISSION SYSTEM

TITLE PLAN & PROFILE - PART 3

TYPE	PLANT	BLDG	FLOOR	SHT OF	CLASS	SCALE	ID	DWG NO	REV
P	X	X-5015			U	AS NOTED	CP4-03	X-5015-10C	1



NOTE:

1. FOR GENERAL NOTES & LEGEND SEE DWG. X-2230-14-C
2. CONTRACTOR IS TO NOTIFY THE CONTRACTING OFFICER 48 HOURS BEFORE EXCAVATING AROUND THE EXISTING 16 IN. DIAMETER RCW BLOWDOWN LINE.
3. EXISTING ELECTRICAL POLE #1404-A TO BE SUPPORTED OR RELOCATED AS REQUIRED DURING CONSTRUCTION OF U/G UTILITIES.

SECTION & DETAIL KEY

NUMBER OF SECTION OR DETAIL

DRAWING ON WHICH SECTION OR DETAIL IS TAKEN

DRAWING ON WHICH SECTION OR DETAIL IS SHOWN

NUMBER IS PREFIXED BY: X-2230-__-C, X-2230__-__-C, X-223__-__-C UNLESS NOTED OTHERWISE

REV.	DESCRIPTION	APPROVED—INITIALS AND DATE			
	REVISION OR ISSUE PURPOSE	A-E	OCPO	EPEO	
1	AS BUILT	11/23/79			
0	CERTIFIED FOR CONSTRUCTION	12/17/79	8/15/79	8/16/80	

APPROVALS	DATE
R.J. BRINDIST F.PODOKSIK DRAWN	5/15/79
CHECKED	8/17/80
CHIEF	8/17/80
A-E	8/17/80
OCPO	8/17/80
EPEO ENGR	8/16/80

As-Built drawings by Catalytic, Inc. are prepared from information furnished by the Construction Contractor. Catalytic signature (or initial) in the "As-Built" revision block namely attests to the fact that Catalytic has added these revisions which have been provided to Catalytic by the Contractor. Catalytic, Inc. is not responsible for the accuracy or authenticity of the as-built information.

"AS-BUILT DRAWING"

(QL) Lifetime Quality Records

UNITED STATES
DEPARTMENT OF ENERGY
CATALYTIC, INC.
PHILADELPHIA, PENNSYLVANIA
DE-AC05-76ET05132 CATALYTIC INC CONTRACT NO 43115

PROJECT: GAS CENTRIFUGE ENRICHMENT PLANT
SUBPROJECT: OUTSIDE UTILITIES (518)
TITLE: UNDERGROUND PIPING LOCATION PLAN - SHEET 9

PLANT PORTION/UNIT	BUILDING	FLOOR	SHEET	OF	TYPE	CLASS	REV.
					D	C	1

SCALE: 1" = 50'-0" | DRAWING NO: DP1-14 | X-2230-23-C

MATCH LINE E6560.00 FOR CONTINUATION SEE DWG. X-2230-18-C
MATCH LINE N5600 FOR CONTINUATION SEE DWG. X-2230-19-C
MATCH LINE FOR CONTINUATION SEE DWG. X-2230-21-C
MATCH LINE N8150.00 FOR CONTINUATION SEE DWG. X-2230-15-C
DESCRIPTIVE NORTH
X-3006
X-3004
X-3034
X-3003
X-3005
X-7727F
X-2207T
E6400
E6200
E6000
E5800
E5600
E5560.00
E5400
E6800
E6600
N5600
N5400
N5200
N5000
N4800
N4600
N8800
N8600
N8400
N8200
℄ ROAD E6369.67
℄ ROAD E6374.33
℄ ROAD E6043.00
℄ ROAD E5745.67
℄ ROAD E5750.33
℄ ROAD E5465.00
℄ ROAD AND SDU-60"φ N4775.00
MH-C-34
MH-C-35
MH-C-36
MH-C-37
MH/S-C-51
MH/S-C-52
MH/S-C-53
MH/S-C-54
MH/S-C-55
MH/S-C-56
MH/S-C-57
CB-C-26
CB-C-27
CB-C-28
CB-C-29
CB-C-30
CB-C-31
CB-C-32
SSU-219-10"-110
SSU-219-8"-110
PROFILE SSU-219-8"-110
LIMIT OF LANDSCAPING SHALL EXTEND NORTH TO N5658.00
LIMIT OF LANDSCAPING E5490.00
LIMIT OF LANDSCAPING SHALL EXTEND EAST TO E6646.00 AND NORTH TO N5125.00
TRANSFER CORRIDOR
ENLARGED PLAN
L.O.W. E5441.00
L.O.W. E5442.50
L.O.W. N5125.00
L.O.W. E5506.58
SWU-249-10"-105 E5463.50
YA-137-2"-136 N5434.50
FWD-269-8"-105 N5449.00
RHWR-243-12"-138
RHWS-243-12"-138
FWD-288-8"-105
RCW-16" (BLOWDOWN)
SSUP-10"
SDU-15"
SDU-24"
℄ E6638.00
℄ E6478.00
H82
H83
L.O.W. N8610.75
NUMBER OF SECTION OR DETAIL
DRAWING ON WHICH SECTION OR DETAIL IS TAKEN
DRAWING ON WHICH SECTION OR DETAIL IS SHOWN
SECTION & DETAIL KEY
NUMBER IS PREFIXED BY X-2230-__-C X-2230-__-C X-223_-__-C UNLESS NOTED OTHERWISE

NOTE:

1. FOR GENERAL NOTES AND LEGEND SEE DWG. X-2230-14-C
2. FOR VALVES & REDUCERS NOT SHOWN ON "50" SCALE PLAN, SEE APPLICABLE ENLARGED PLAN.
3. CONTRACTOR IS TO NOTIFY THE CONTRACTING OFFICER 48 HRS BEFORE EXCAVATING AROUND THE EXISTING 16 INCH DIAMETER RCW BLOWDOWN LINE.

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"AS-BUILT DRAWING"

(QL) Lifetime Quality Records

REV	DESCRIPTION	A-E		OCPO	EPEO
2	AS BUILT	11/22/85			
1	ADDED RHWR/S-243-12"-138 LINE	6/11/81		6/11/81	6/11/81
0	CERTIFIED FOR CONSTRUCTION	12/17/80		12/17/80	12/17/80
REVISION OR ISSUE PURPOSE		APPROVED-INITIALS & DATE			

APPROVALS	DATE
J. FILLER DRAWN	2-5-80
CHECKED	8/7/80
CHIEF	8/7/80
A-E	12/17/80
OCPO	12/17/80
EPEO ENGRG	12/17/80

UNITED STATES DEPARTMENT OF ENERGY

CATALYTIC, INC.
PHILADELPHIA, PENNSYLVANIA

DE-AC05-76ET05132 CATALYTIC, INC CONTRACT NO 43115

PROJECT: GAS CENTRIFUGE ENRICHMENT PLANT

SUBPROJECT: OUTSIDE UTILITIES (518)

TITLE: UNDERGROUND PIPING LOCATION PLAN - SHEET 6

PLANT: PORTSMOUTH, OHIO | BUILDING | FLOOR | SHEET OF | TYPE P | CLASS U

SCALE: 1"=50'-0 | ID: DP1-14 | DRAWING NO: X-2230-20-C | REV: 2